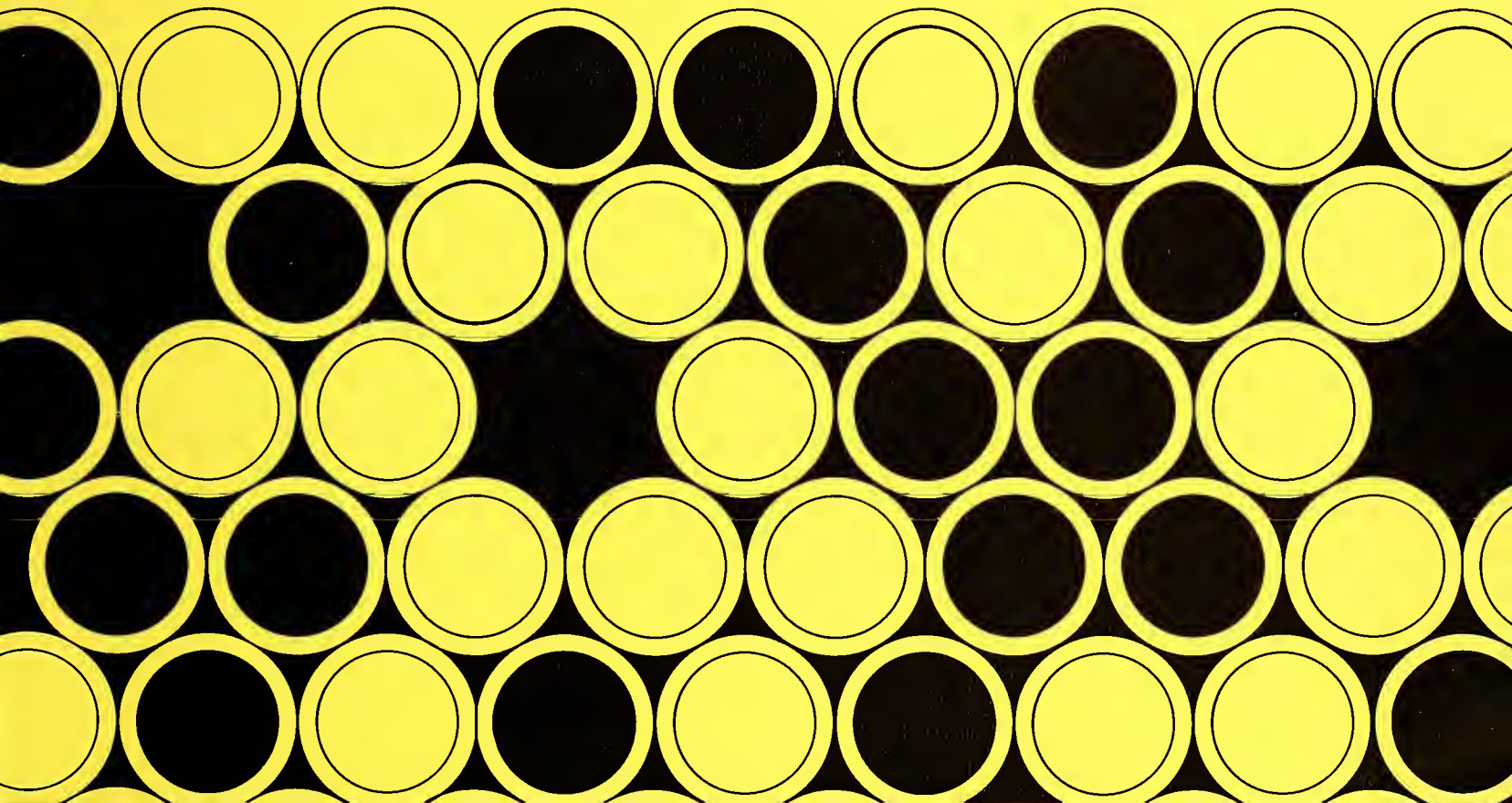


# randolph technical institute • 1977-79 catalogue

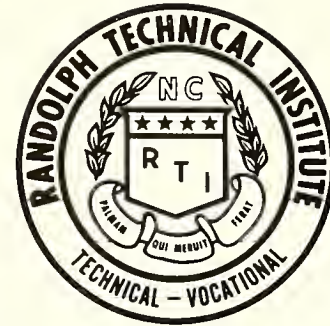




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# RANDOLPH TECHNICAL INSTITUTE



## AFFIRMATIVE ACTION

Randolph Technical Institute offers Equal Employment and Educational Opportunities to all employees and students, and prospective employees and students of the institution, without regard to race, color, religion, national origin, political affiliation, sex or age (except where sex is a bona fide occupational qualification).

All inquiries and questions that a person may have about his or her treatment as an employee or student under Randolph Technical Institute's compliance with Title IX of the Education Amendments of 1972, Equal Employment Opportunity and Affirmative Action guidelines may be addressed to:

John A. Purvis  
Affirmative Action Officer  
and Title IX Coordinator

Randolph Technical Institute  
P. O. Box 1009  
Asheboro, N. C. 27203  
919-629-1471 Ext. 42

## General Catalog 1977-79

P. O. Box 1009  
ASHEBORO, N. C. 27203  
Phone 919 629-1471

Cover Designed By Bill McCollum

Photos By Lloyd Aaron, Cindy Burnham, Steve Moser, Dixie Vereen.

Revised and Reprinted 1-78

Randolph Technical Institute was established in 1962 as an "open-door" institution to persons of both sexes and all racial and ethnic groups and it continues to follow the same open admission policy.

## GREETINGS FROM THE PRESIDENT

Welcome to Randolph Technical Institute — an institute of learning serving primarily Randolph and surrounding counties and operating within the legal framework as mandated by the North Carolina General Assembly. **The Institute opens its doors to any adult desiring to learn.** Each student is offered the opportunity and is encouraged to develop his intellectual, social, occupational, civic, cultural, and physical potential. The institute is committed to providing quality, inexpensive, continuing educational opportunities in a wide range of credit and non-credit curricula and courses designed to meet the needs of adults at facilities located throughout the county.

In keeping with the general purpose of Randolph Technical Institute, the board of trustees, the staff, and the faculty have adopted certain specific objectives. These are to:

Provide quality instruction to all who enroll.

Provide the opportunity for individuals to complete elementary or secondary education by offering adults basic education and high school diplomas and equivalency programs.

Provide a variety of one-year vocational, two-year technical and two-year general education programs that reflect the changing needs of business, industry, and professional and public services.

Provide general interest courses that meet adult education and community service needs.

Provide guidance and counseling services to assist education and community service needs.

Provide guidance and counseling services to assist students in developing an understanding of themselves and in attaining their career objectives.

Provide cultural programs and educational services for community enrichment.

Provide assistance and information to stimulate interest in education throughout the community.

Our staff, faculty, and board of trustees are highly qualified, professional people who are dedicated to providing the services and courses offered throughout the community. We will continue to listen to you as you tell us what you expect from your institute. At the same time, we will keep abreast of local, regional, and national trends in order to provide meaningful programs that lead to good-paying jobs and personal satisfaction.

We wish to thank you for your interest and support as we work to keep your trust and faith in our ability to provide comprehensive community education.

Invest yourself in Randolph Tech and discover that dividends can be measured in more ways than money.

**RANDOLPH TECH IS YOURS — FOR THE TAKING.**

M. H. Branson,

*M. H. Branson*  
President



# RANDOLPH TECHNICAL INSTITUTE

## STATEMENT OF PURPOSE

It shall be the purpose of Randolph Technical Institute to meet the educational needs of adults 18 years of age or older, within the assigned function of the North Carolina Community College system. The educational programs offered by Randolph Technical Institute shall include two-year associate degree programs, one-year vocational programs, and Continuing Education programs; further, General Education courses shall be offered through contractual agreement with a four-year institution. The Institute shall strive not only to send graduates into industry, business, and other educational institutions, but also to provide cultural enrichment for its students and the community. To realize this stated purpose, educational opportunities must be available to all students at their level of capability in an atmosphere conducive to personal search and discovery. Randolph Technical Institute is dedicated to this purpose and continually strives to be an educational leader in the community.

## OPEN DOOR POLICY

As a member of the North Carolina Community College System, Randolph Technical Institute operates under an "open door" admission policy. The "open door" policy does not mean that there are no restrictions on admission to specific programs. Special admission requirements, such as educational qualifications, physical abilities, test scores, and State Board policy restrictions, are attached to certain curriculums. Within these restrictions, any person, whether a high school graduate or non-graduate, 18 years of age or older and, who is able to profit from further formal education, will be served by the institution.

## ACCREDITATION

The Institute is accredited by the North Carolina State Board of Education, Department of Community Colleges, and has full accreditation as a member of the Southern Association of Colleges and Schools (SACS).



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# INSTITUTE CALENDAR

1977-78

## FALL QUARTER

September 1, 2 (Thursday, Friday)  
September 6 (Tuesday)  
September 13 (Tuesday)

October 4 (Tuesday)

November 21 (Monday)

## WINTER QUARTER

November 22, 23 (Tuesday, Wednesday)  
November 24, 25 (Thursday, Friday)  
November 28 (Monday)  
December 5 (Monday)

December 16 (Friday 5:00 p.m.)  
January 2 (Monday)  
January 9 (Monday)

February 24 (Friday)

## SPRING QUARTER

March 2, 3 (Thursday, Friday)  
March 6 (Monday)  
March 13 (Monday)

March 23 (Thursday 10:00 p.m.)  
March 28 (Tuesday)  
April 4 (Tuesday)

May 23 (Tuesday)

## SUMMER QUARTER

May 25, 26 (Thursday, Friday)  
May 29 (Monday)  
June 5 (Monday)

June 26 (Monday)

June 30 (Friday 5:00 p.m.)  
July 10 (Monday)  
August 18 (Friday)  
August 20 (Sunday)

Registration  
Classes begin  
Last day to register,  
drop, or add courses  
Last day to withdraw  
from a course without  
receiving an "F"  
End of Fall Quarter

Registration  
Thanksgiving Holidays  
Classes begin  
Last day to register,  
drop, or add courses  
Christmas Holidays begin  
Classes resume  
Last day to withdraw  
from a course without  
receiving an "F"  
End of Winter Quarter

Registration  
Classes begin  
Last day to register,  
drop, or add courses  
Easter Holidays begin  
Classes resume  
Last day to withdraw  
from a course without  
receiving an "F"  
End of Spring Quarter

Registration  
Classes begin  
Last day to register,  
drop, or add courses  
Last day to withdraw  
from a course without  
receiving an "F"  
Summer Holidays begin  
Classes resume  
End of Summer Quarter  
Graduation Exercises

1978-79

## FALL QUARTER

August 31, September 1 (Thursday, Friday)  
September 5 (Tuesday)  
September 12 (Tuesday)

October 3 (Tuesday)

November 20 (Monday)

## WINTER QUARTER

November 21, 22 (Tuesday, Wednesday)  
November 23, 24 (Thursday, Friday)  
November 27 (Monday)  
December 4 (Monday)

December 15 (Friday 5:00 p.m.)  
January 2 (Tuesday)  
January 9 (Tuesday)

February 26 (Monday)

## SPRING QUARTER

March 1, 2 (Thursday, Friday)  
March 5 (Monday)  
March 12 (Monday)

April 2 (Monday)

April 12 (Thursday 10:00 p.m.)  
April 17 (Tuesday)  
May 22 (Tuesday)

## SUMMER QUARTER

May 31, June 1 (Thursday, Friday)  
June 4 (Monday)  
June 11 (Monday)

June 29 (Friday 5:00 p.m.)  
July 9 (Monday)  
July 9 (Monday)

August 24 (Friday)  
August 26 (Sunday)

Registration  
Classes begin  
Last day to register,  
drop, or add courses  
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# PROGRAMS OF STUDY

## ASSOCIATE DEGREE

Accounting  
Business Administration  
Commercial Graphics  
Electronics Technology  
Executive Secretary  
Floral Design and Management  
General Office Technology  
General Education  
Interior Design  
Legal Secretary  
Photography

## DIPLOMA

Automotive Mechanics  
Electrical Maintenance  
Machinist  
Nursing (LPN)  
Photofinishing Specialist  
Welding

## CERTIFICATE

Automotive Mechanics  
Electrical Maintenance  
Floral Design  
Industrial Machinist  
Industrial Mechanics  
Industrial Welding

## THE INSTITUTE

Randolph Technical Institute began operation in 1962 as a joint city-county industrial education center under the direction of the Trades and Industrial Division, Department of Vocational Education. The North Carolina legislature in 1963 established a separate system of community colleges and Randolph Technical Institute at that time became part of that system.

The Institute is approved by the North Carolina State Department of Community Colleges under the State Board of Education, as specified in Chapter 115A of the General Statutes of North Carolina. The Institute Board of Trustees has been granted authority to award the Associate in Applied Science and Associate in General Education Degrees, Vocational Diploma, and Certificate by the Department of Community Colleges and the State Board of Education.

Community Service curriculums include a state approved High School Equivalency Program and a variety of Preparatory Level Programs. The Institute is a member of the American Association of Junior Colleges and American Technical Education Association. All Occupational, High School, and Preparatory Programs are approved by the Veterans Administration.

As a member of the North Carolina Community College System, Randolph Technical Institute offers occupational and adult education to meet the educational needs of the youth and adults served by the Institute. The Institute accepts men and women for enrollment in a wide variety of subjects designed to meet the changing technology and complex social development of its community. Students are offered the type of education which will better provide professional competence in their major field of study.



We believe that this nation will remain a great and strong nation, an innovator and a leader in world affairs, as long as its people are an educated people. Furthermore, we believe that, in the American tradition each student has the right, as an individual, to the very best educational opportunity that the community and state can provide. Therefore we are obligated to consider each student in light of his potential and work with him in a manner designated to help him develop his capacities to the fullest.

## **INFORMATION ON PROGRAMS OF STUDY**

Randolph Technical Institute offers Collegiate level programs to include the following:

Two-year Associate Degree programs in engineering, business, general education, and design-related technologies.

The Institute also offers one-year Diploma and Certificate programs in service and industrial occupations.

### **GENERAL EDUCATION**

This program is a cooperative effort between Randolph Technical Institute, Asheboro, North Carolina, and the University of North Carolina at Greensboro (UNC-G), Greensboro, North Carolina. Randolph Tech provides the facilities and UNC-G provides the instructional faculty. Credits earned in this program are recorded on transcripts at UNC-G. Evaluation for transfer purposes will be made from these transcripts by the college or university to which the request for transfer is made. These courses are transferable to all 4-year institutions which accept extension course credits from UNC-G.

### **COMMUNITY SERVICE EDUCATION**

The Institute offers programs to meet the needs of the adult community through a wide range of courses in several areas:

Adult Basic Education courses in fundamentals of reading, writing, spelling and arithmetic (grades 1-8);

Adult Learning Laboratory — adult high school courses using programmed instruction (grades 9-12);

Continuing education courses for adults. Classes are offered year-round, day and evenings.

### **DEGREES**

Randolph Technical Institute offers the following degrees:

Associate in Applied Science

Associate in General Education

### **SPECIFIC DEGREE REQUIREMENTS**

#### **Associate in Applied Science**

Satisfactory completion of an approved program of not less than 108 credit hours.

#### **Associate in General Education**

Satisfactory completion of not less than 66 credit hours in liberal education and elective courses.

A minimum cumulative grade point average of 2.0. Students must have twice as many quality points as credit hours attempted in order to graduate. Satisfy all general and specific requirements of the Institute, including fulfillment of all financial obligations.

### **CERTIFICATES AND DIPLOMAS**

Randolph Technical Institute awards certificates and diplomas for a wide variety of vocational and educational programs. Diplomas are issued for completion of all one-year programs.

### **ADDITIONAL DEGREES OR DIPLOMAS**

Upon the request of a student and the approval from the Dean of Occupational Education, a student may seek an additional diploma or degree in a different discipline. To earn an additional diploma or degree, the student must satisfactorily complete all required courses in the curriculum as approved by the State Board of Education. Each request will be handled on an individual basis, and the administration reserves the right to require additional work when available.

## **STUDENT SERVICES**

### **OBJECTIVES**

To provide:

1. A well-rounded program to assist the student in making the adjustment from secondary and adult education to the more specialized and/or general post-secondary education at the college level.
2. An atmosphere and leadership for Institutional guidance of students that will encourage student openness and involvement, and will aid in developing self-reliant, responsible behavior.
3. A testing and placement program in keeping with the needs and trends of students of the Institute.
4. Up-to-date and accurate records on all students of the Institute with proper security and confidence precautions enforced.

5. Leadership in Institutional recruiting programs.
6. Leadership in securing and distributing financial aid for students.
7. Leadership and encouragement for the development of student organizations and activities.
8. A health program appropriate to the needs of the student body.
9. Information and aid to students for job placement and program advisement.
10. Coordination for institutional follow-up on former students.

## **ADMISSIONS**

### **OPEN DOOR POLICY**

As a member of the North Carolina Community College System, Randolph Technical Institute operates under an “open door” admission policy. The “open door” policy does not mean that there are no restrictions on admission to specific programs. Special admission requirements, such as educational qualifications, physical abilities, test scores, and State Board policy restrictions, are attached to certain curriculums. Within these restrictions, any person, whether a high school graduate or non-graduate, 18 years of age or older and, who is able to profit from further formal education, will be served by the institution.

The Dean of Student Services is designated as the Admissions Officer for the Institute.

### **ELIGIBILITY**

Applicants for Admission to Randolph Technical Institute must be 18 years of age or high school graduates if under eighteen. Special consideration may be given on an individual basis to students not meeting these specific entrance requirements. The Institute will accept students with a high school equivalency diploma.

### **ADMISSIONS REQUIREMENTS**

A high school diploma or the equivalent is required of all applicants for degree and diploma programs. Exceptions may be made for diploma programs, if the counseling staff, after interviewing prospective students who are not high school graduates, feel that these individuals can profit from curriculum instruction.

#### **A. Associate Degree Programs**

1. The applicant must be in acceptable physical and mental health.
2. A medical exam is required of each applicant.
3. Applicants for admission to the Electronics Engineering program must present two units of advanced math.
4. Applicants for admission to the Business programs must be enrolled for a minimum of half time and seeking a degree.
5. Applicants for admission to the following programs must successfully pass a color blindness test. These are: Commercial Graphics, Interior Design, Photography, and Photofinishing Specialist.

#### **B. Diploma Programs**

1. The applicant is eighteen or more years of age and is not enrolled in high school, or is a high school graduate (if under 18).
2. The applicant can benefit from enrollment in the program.
3. The enrollment quota for the curriculum is not filled.
4. The applicant has no physical disability that would prevent performance of the physical tasks demanded by the training program of the occupation.

Applicants to the Practical Nursing program shall also:

1. Take the Otis Gamma Test administered by a member of the Student Services staff.
2. Be approved by an admissions committee, which comes from the institutional staff of the Practical Nursing Department and the Student Services staff.

The Institute reserves the right to accept or reject credits earned at other colleges, universities, and institutions. In general, credit earned with a grade of “C” or better is accepted, provided the credit is appropriate to the student’s program.

Applicants to the UNC-G General Education program are to take the Scholastic Aptitude Test (SAT) and present these scores at the time they make application.

Applicants for admission to the Electrical Maintenance program must present one unit of algebra.

A medical form is required of all applicants for diploma and degree programs.

## **ADMISSIONS INFORMATION**

High school seniors intending to enroll in a specific curriculum should submit their applications January 1 of their senior year, or as soon after as possible, for admission to the fall quarter of that year. Applicants will be notified of receipt of their applications and fees. No application will be processed until this pre-admission deposit of \$10.00 has been paid. Applications can be obtained from all high school counselors and from the Institute Student Services Office. This office is open from 8:00 a.m. to 5:00 p.m. Monday through Friday. For admissions information, call Student Services, (919)-629-1471.

## **PRE-ADMISSION PROCEDURES**

Official transcripts — Applicants who are high school graduates should request their high school counselors to submit a copy of their high school transcript. In cases where the last six weeks work is not completed, a supplemental grade report should be forwarded to the Institute after the student's graduation.

Non-high school graduates should submit transcripts of all high school work.

Students transferring from other colleges or post-high school institutions must submit official transcripts from all such institutions attended.

Testing — All two-year Associate Degree students are administered the Verbal Reasoning and Numerical Ability Tests of the Differential Aptitude Tests prior to an admissions counseling conference. The Otis Gamma Test is administered to all Practical Nursing applicants.

In cases where Associate Degree applicants have prior test scores such as the College Board, additional institutional testing may not be necessary.

Transcripts and test scores are not used as a basis for admission to the Institute. They are used in counseling and advising students as to selection of a program.

## **REGISTRATION**

Registration is the process of enrolling in a schedule of courses, or a program at the beginning of each quarter or at other specified times.

## **LATE REGISTRATION**

A late registration fee of \$5 will be charged to all students who register after the regular registration date on the school calendar or published dates. Exception may be made in individual cases at the discretion of the Dean of Student Services and Registrar.

## **ADMISSION WITH ADVANCED PLACEMENT**

This provides for advanced placement based on the proficiency examination. Where an individual student's occupational experience and/or educational background closely parallels those experiences and objectives required by a course, the instructor involved may evaluate the student's performance in these academics or skills by appropriate proficiency examinations to determine waivers of such course(s). Where courses are waived for a student: (1) student will not register for that course, and (2) the proficiency will be noted on the student's permanent record without quality point consideration. Further, the student may substitute electives for these courses waived by proficiency. No proficiency examination will be given prior to the approval of the Dean of Occupational Education, the instructor involved, and the Departmental Chairman. Copies of the proficiency examinations must be filed with the Dean of Occupational Education and the instructor will provide results of proficiency to Student Services to record on student permanent records.

Students may be considered for advanced placement in English, Mathematics, or other course offerings by submitting satisfactory scores on the College Level Examination Program (CLEP) or the Advanced Placement Program (APP) of the College Entrance Examination Board. Each request will be handled on an individual basis by the Dean of Student Services.

## **TRANSFER CREDIT FROM OTHER INSTITUTIONS**

The Institute reserves the right to accept or reject credits earned at other colleges, universities, and institutions. In general, credit earned with a "C" or better is accepted, provided the credit is appropriate to the student's program. The following guidelines apply to the granting of transfer credit:

### **English**

Credit for technical English 101, 102, and 103 will be granted to the student who has completed at least two semesters or three

quarters of freshman English grammar and composition from an accredited institution.

Courses will be transferred with a final grade of “C” or better with the exception of a “D” on the first course of a two or three course sequence. The “D” will transfer if the next course is a “C” or better.

Example: ENG 101 - “D”, ENG 102 - “C”. The “D” will transfer.  
ENG 204 — Credit will be granted for oral communications or public speaking.

**Social Science**

Courses normally accepted for credit are psychology, sociology, political science, history, and economics. If a student has credit for one social science course, he is given credit for the one most comparable with the one he has taken.

Example: General Sociology. Credit for this will be applied toward American Institutions. If Economics is taught within the program of study, and if two other social sciences are also required, the credit is applied toward the economics course and not the social science.

**Math**

MAT 110 — Business Math — credit is given for a comparable course of this nature or for the first course in College Math. Technical Math is handled on an individual basis with the Department Head.

**Major Area**

All courses transferred into major areas are determined by the Department Head and Student Services.

**Credit Between Programs**

A student who completes English 109 and English 111 as a part of the Photofinishing Specialist program and then decides to enter the Photography Generalist program may receive credit for English 103 and English 204 if he or she has made at least a C on each course.

The transferring student would be required to take English 101 and 102.

**CLASSIFICATION OF STUDENTS**

**REGULAR STUDENTS**

Students registered in continuing programs of the Institute leading to associate degrees and diplomas are considered regular full-time students.

**FULL-TIME STUDENTS**

Students enrolled for 12 or more quarter hours are considered full-time.

**PART-TIME STUDENTS**

Students enrolled for 1 through 11 quarter hours are considered part-time.

**SPECIAL STUDENTS**

Any student who is not enrolled in a regular curriculum and whose final objective does not include graduation from Randolph Technical Institute is classified as a special student.

**FOREIGN STUDENTS**

Credentials of applicants from foreign countries will be evaluated in accordance with the general admission policy. An application, along with all necessary transcripts, must be submitted to the Institute no later than May 15 in the year the applicant desires to enter. Applicants must demonstrate a satisfactory command of English.

**TUITION**

**Quarter Hours**

12 and up	\$ 39.00/Quarter	
1 through 11	3.25/Credit Hour	

12 and up	\$198.00/Quarter	(Out-of-State)
1 through 11	16.50/Credit Hour	(Out-of-State)

**Semester Hours**

12 and up	\$ 58.50/Semester	
1 through 11	4.88/Credit Hour	

12 and up	\$297.50/Semester	(Out-of-State)
1 through 11	24.75/Credit Hour	(Out-of-State)

### Miscellaneous Service Charges

PRE-TUITION DEPOSIT (Paid by all new regular curriculum students) ----- \$10.00  
If a student fails to enroll, he may request in writing that the pre-tuition deposit be credited to a future quarter tuition charge within that school year.  
Official Transcript Fee (Each regular student will receive two transcripts free; additional copies each). — .50.

### ACTIVITY FEES

All full-time and part-time Quarter students will pay an activity fee by the quarter and/or semester on an academic year basis. No activity fee will be charged for the summer quarter or semester.

Activity fees will be as follows:

#### Quarter Hours

\$5.00 per credit hour up to a maximum of \$5.00 per quarter.

#### Semester Hours

\$7.50 per credit hour up to a maximum of \$7.50 per semester. This would become effective with the beginning of the summer quarter/semester 1977. Please note: ALL ACTIVITY FEE MONIES ARE NON-REFUNDABLE.

Student Insurance -----	\$4.50
(Degree or Diploma) -----	\$8.00*
(Certificate) -----	\$5.00*
Adult Basic Education -----	No Charge
High School Equivalency Program -----	No Charge
Public Service Programs -----	No Charge
Business and Industrial Service Programs -----	\$5.00 Registration Fee
Cultural Enrichment Programs -----	\$5.00 Registration Fee

\*To be paid at spring quarter registration

### RESIDENCY FOR TUITION PURPOSES

North Carolina law (G. S. 116-143.1) requires that to qualify as an in-state student for tuition purposes, a person must have established legal residence (domicile) in North Carolina and maintained that legal residence for at least 12 months immediately prior to his or her classification as a N. C. resident. Every applicant for admission shall be required to make a statement

as to his or her length of residence in the state.

To be eligible for classification as a resident for tuition purposes, a person must establish that his or her position in the state currently is, and during the requisite 12-month qualifying period was, for purposes of maintaining a bona fide domicile rather than of maintaining a mere temporary residence or abode incident to enrollment in an institution of higher education.

Any student wishing to be considered as a resident for tuition purposes must make application to the Dean of Student Services. The application procedure and process are available in the office of Student Services.

The burden of establishing facts which justify classification of a student as a resident entitled to in-state tuition rates is on the applicant for such classification.

### STUDENT REFUND POLICY

If approved by the Dean of Student Services and the Business Manager, refunds of 2/3 of the tuition fee may be made in cases where the student is compelled by unavoidable reasons to withdraw within ten calendar days after the first day of class as published in the school calendar. Tuition refunds will not be considered for tuition of \$5 or less, except if a course or curriculum fails to materialize, all the student's tuition shall be refunded. No refunds will be made after the ten-day period except in cases where the student is a **Veteran or War Orphan**. Veterans or War Orphans receiving benefits under the U. S. Code, Title 38, Chapter 33 and 35, can be refunded pro rata portion of the tuition fee not used up at the time of withdrawal of such students. A student has the option of requesting that his entitled refund be credited to a quarter within the next four (4) calendar quarters. During the drop/add period, as specified in the school calendar, charges will be made for courses added. If a program fails to materialize or a person is not accepted, the \$10 pre-tuition deposit will be refunded.

Activity fees, student insurance, late registration fees, and any other fee that is not designated as tuition fee are not refunded. One hundred percent of book cost will be refunded for books returned to the Campus Store when the Bookstore is in error. If the books are returned for any reason other than Campus Store error, 10% of the refund will be deducted as a service

charge. Fifty percent refund will be made for marked books. Refunds will not be made later than 10 days after registration.

### **Expenses**

Asheboro and Randolph County area students who commute to Randolph Technical Institute may expect to spend an average of \$400 per year for tuition, books, and supplies. Transportation to and from home is an additional expense. Non-resident students must consider off-campus room and board and personal expenses in addition to the above. A student in this category could expect an approximate total expense of \$2,800. The expenses will vary according to the program in which a student is enrolled.

## **FINANCIAL AID**

### **Scholarships**

Scholarships are awarded to deserving students who are enrolled or plan to enroll at Randolph Technical Institute. To be eligible, an applicant must be enrolled in good standing or be accepted for enrollment as a full-time student. Final consideration for awarding scholarships is based on financial need. Generally, scholarships cover the cost of tuition and activity fee.

### **Grants**

The Basic Educational Opportunity Grant Program is a Federal Aid Program designed to provide financial assistance to U. S. citizens who need it to attend post-high school educational institutions at the undergraduate level on at least a half-time basis and who have not yet earned their first Bachelor's Degree from any institution.

### **Short-term Loans**

Students who have satisfactorily completed one quarter at Randolph Technical Institute may borrow sums up to \$50 repayable in 30 days. These loans are granted to students who face sudden and serious need for small loans.

### **Long-term Loans**

Insured Student Loans (College Foundation, Inc.) are available to both first year and continuing students who are legal residents of North Carolina. The maximum amount available to students is \$2,500 annually. The deadline for submitting applications is

July 1 of the coming school year. After July 1 of each year, loan applications will be processed as long as funds are available.

### **Work-Study**

The Institute participates in the College Work-Study Program. This Federally supported program is available to those students who qualify on the basis of financial need. Students work an average of 15 hours weekly while attending classes. During the summer and other vacation periods when they do not have classes, students may work full-time (40 hours per week) under this program. Students who work 10 to 15 hours per week typically earn \$600 to \$900 per academic year.

## **APPLYING FOR AID**

Students may apply for a scholarship, grant, loan, or a campus job under the College Work-Study Program by contacting the financial aid officer in Student Services.

### **Student Employment**

Students interested in working during the school year should be reminded that technical institute courses demand a considerable amount of a student's time. The office of Student Services assists in placing students in part-time jobs. Many business firms make job opportunities available by registering their needs with this office. Efforts are made to place students on jobs for which they are capable and which do not interfere with their class schedule.

## **SOCIAL SECURITY BENEFITS**

In 1965 the Social Security Act was changed to benefit some students attending college. For those who remain full-time students beyond high school, benefits have been extended from age 18 to 22. High school students who are less than 18 and are now receiving benefits should know that these benefits may continue as long as they are less than 22 years of age, unmarried, and enrolled as full-time students at an accredited college, university, vocational, trade, or technical school. The fact of this full-time attendance must be reported to the Social Security Administration.

## **VETERAN'S INFORMATION**

The new Veterans Readjustment Benefits Act (Public Law 358)

provides educational subsistence to those veterans of the armed forces who served on active duty for more than 180 days, any part of which came after January 31, 1955. Applications should be sent to the Veterans Administration Regional Office, 251 North Main Street, Winston-Salem, North Carolina. 27201

#### **Disabled Veterans**

A veteran with a disability may have benefits under Public Law 894 and 815 and should make application to the nearest Veterans Administration Regional Office at least four weeks prior to registration.

#### **Children of Deceased or Disabled Veterans**

The War Orphans Educational Assistance Act (Public Law 634) provides educational assistance for some children of deceased or totally and permanently disabled veterans. Information regarding eligibility should be requested from a Veterans Administration Regional Office.

Once eligibility has been established, students should obtain admission to the Institute prior to making application to the Veterans Administration for a specific program. Students must have their course work approved by the institutions from which they plan to obtain a degree, and these courses must be listed on the Certificate of Eligibility, which is issued by the Veterans Administration. It is essential that all students entitled to veteran benefits present a copy of their Certificate of Eligibility to Student Services as soon as their registration is completed. Information regarding quarter credit requirements for subsistence may also be obtained from the school office. A period of two months should be allowed for receipt of the Veterans Administration subsistence check.

Under the guidelines administered by the Veterans State Approval agency, the institution maintains a written record of the previous education and training of the eligible veteran and indicates that appropriate credit has been given for previous education and training with the training period shortened proportionately and the eligible person and the VARO so notified.

#### **STANDARDS OF PROGRESS, ATTENDANCE, AND CONDUCT**

Public Law 93-508 requires that each educational institution approved for veterans to receive educational benefits (G. I. Bill)

must establish written policies that clearly state what is expected of the veteran in the areas of academic progress, class attendance, and conduct.

Many of these expectations are required of all students, veterans and non-veterans, and are covered in the student handbook. Stated below are two policies not covered in the Student Handbook or the Veterans Affairs Handbook that effects only veterans:

#### **1. Procedure for determining unsatisfactory progress for veterans:**

A veteran is considered to be making unsatisfactory progress when he fails 50% of the number of HOURS for which he is certified to pursue or when he permits his grade point average to fall below 2.0. For this purpose, a grade "I" or "W" counts as unsatisfactory. A veteran who has completed a quarter with unsatisfactory progress will be permitted to enroll for the next quarter but will be placed on VA probation. If the veteran doesn't pass at least 50% of the HOURS attempted and bring his grade point average up to 2.0 by the end of the probationary quarter, his VA benefits will be terminated. This termination will remain in effect until the veteran has demonstrated satisfactory progress for a period of one quarter. Once satisfactory progress is demonstrated the veteran's benefits will be reinstated for the next quarter.

Veterans who withdraw from school with a "W" grade or receive an incomplete grade of "I" for a class will have those class hours computed as part of their total hours attempted. Any veteran who withdraws from all subjects undertaken will have his educational benefits terminated on the date of withdrawal. Veterans who withdraw from all subjects undertaken may enroll to attend the next quarter but will be placed on probation as defined above.

#### **2. Grade point average requirement for veterans:**

A veteran student will be placed on academic probation following any quarter in which the grade point average is less than 2.0. A veteran student may receive educational benefits for only one quarter while on academic probation. Veterans who are terminated for unsatisfactory conduct and/or progress must go through Veterans Administration Guidance and Counseling before they can be recertified for educational

benefits. This required counseling session may delay from 3-6 months the reinstatement of educational benefits.

Veterans enrolled in programs of secondary education are considered to be making unsatisfactory progress if they have not achieved a level of progress consistent with their time in the program. Veterans who are making unsatisfactory progress will be terminated to the Veterans Administration for pay purposes.

The rate of evaluation will be:

(1) High School Equivalency	940 Hours
(Evaluation of progress each	300 hours)
(2) Vocational Preparatory	320 Hours
(Evaluation of progress each	150 hours)
(3) Technical Preparatory	640 Hours
(Evaluation of progress each	300 hours)
(4) College Preparatory	900 Hours
(Evaluation of Progress each	300 hours)

A veteran who closes the gap between hours enrolled and progress achieved may be reinstated to the Veterans Administration and continue in the program.

The Learning Lab Coordinator will be responsible for determining satisfactory progress for veterans enrolled in secondary education and notifying the Veterans Officer of the Institute who will make the necessary change of status to the VARO for pay purposes.

#### **Veteran's Benefits**

While attending Randolph Technical Institute, a veteran is entitled to the following benefits:

Up to \$65.00 per month to pay for tutorial help

\$311.00 per month for a single veteran

\$370.00 per month for married veterans

\$422.00 a month for those married with a child, and

\$26.00 for each additional dependent.

#### **COUNSELING**

A staff which includes counselors, and other specialized workers provides appropriate counseling service as indicated by the students' needs.

#### **Admissions Counseling**

is provided to assist students to understand the various types of training programs available in the Institute and to clarify matters which pertain to qualifications and prerequisites.

#### **Vocational Counseling**

is provided to help those students who wish additional assistance in regard to the selection of a vocational objective or specialized field of study. Background of the individual, aptitudes as indicated by tests, current employment patterns, and other factors pertinent to the selection of a vocational choice are considered in making a final vocational choice.

Further information regarding counseling service is available through Student Services.

#### **ADVISORS**

Each student may use his major instructor as a faculty advisor who assists him in planning a schedule to meet his educational goals.

The advisor serves as a consultant concerning class performance and problems, personal or personnel problems, and Institute activities. Advisors will normally be from the student's major field. The advisor also helps to identify students who need counseling or specialized counseling services.

#### **ORIENTATION**

To promote an understanding of the philosophy and standards of Randolph Technical Institute, all new students are expected to participate in an orientation program. The objectives of the orientation program are as follows:

To acquaint students with the physical, academic, and social environment of the Institute.

To present school policies, regulations, and procedures to the students.

To provide an opportunity for staff and faculty to welcome and get acquainted with students.

#### **PLACEMENT SERVICE**

No reputable institution can guarantee jobs for graduates. Randolph Technical Institute assists qualified graduates in

finding suitable employment. Assistance is also available for students who wish to obtain part-time employment while in school. The Institute maintains records on all graduates and provides information concerning each graduate to industries.

## **ACADEMIC REGULATIONS**

### **Attendance**

Each student is expected to attend all class sessions. As all students are adults, some with many responsibilities, an occasional absence from class may be necessary; however, such absences in no way lessen the student's responsibility for meeting the requirements of the class. In the event of any absence it is the student's responsibility to contact each instructor to determine if work missed can be made up.

Death in the immediate family, personal illness, emergencies, and participation in approved Institute student activities will be considered as excusable absences.

Once a student has duly enrolled in a class, i.e., paid registration fee, the student shall maintain membership in said class, until one of the following occurs:

#### **1. Student Withdrawal**

He/she officially withdraws by contacting the Registrar in person. (This constitutes student withdrawal and is effective as of that date.)

#### **2. Administrative Withdrawal**

(A) He/she fails to maintain contact with instructional personnel for two consecutive weeks. (Evidence of maintenance of contact may be through class attendance, submission of course assignments, personal contact, or telephone contact.)

(B) The responsible instructional personnel are reasonably assured that the student does not intend to pursue the learning activities of the class. (This constitutes administrative withdrawal and is effective as of the date.)

IT REMAINS THE STUDENT'S RESPONSIBILITY TO CONTACT THE INSTRUCTOR OR STUDENT SERVICES IN THE EVENT THAT HE OR SHE IS UNABLE TO ATTEND CLASS.

Failure to contact Student Services for official withdrawal will

result in the student's being dropped by the instructor and receiving an "F" on the permanent record.

## **TRANSFERS (Between Programs)**

Students who feel they have made an incorrect vocational choice and wish to change to another field of study, should contact Student Services during the first week of school. Every attempt will be made to help the student select a program that is within his capabilities and interest.

### **Withdrawal/Drop-Add**

Students desiring to withdraw, drop, or add a course after initial registration should contact Student Services to obtain the necessary forms and procedures. A student who fails to withdraw officially will receive a grade of "F" for each course in which he is enrolled. MERELY CEASING TO ATTEND CLASSES DOES NOT CONSTITUTE OFFICIAL WITHDRAWAL, NOR DOES NOTIFICATION TO THE INSTRUCTOR.

### **Course Prerequisites**

All curriculum courses are to be taken in a normal sequence with prerequisites taken as indicated in the institution's catalog.

## **CREDITS**

Credits for courses leading to Associate in Applied Science Degrees and vocational diplomas are given on a quarterly credit-hour basis. (In general, a class which meets one hour, five days a week yields five credit hours.) Laboratory and shop classes vary from this pattern.

## **GRADING SYSTEM**

Letter symbols are used in the evaluation of achievement in all occupational programs. Numerical values (quality points) are assigned to letter grades in computing grade point averages. Grade point averages are determined by dividing total grade points earned by total credit hours attempted. Cumulative grade point averages (G.P.A.) are determined by dividing total grade points by total credit hours earned for a period of more than one quarter.

Numerical	Grade	Evaluation	Points
93-100	A	Excellent	4
85-92	B	Above Average	3
77-84	C	Average	2
70-76	D	Minimum	1
Below 70	F	Failure	0
	I	Incomplete	
	W/P	Withdrawal/Passing	
	W/F	Withdrawal/Failing	

### Grade Reports

A grade report normally is issued to a student each quarter, provided his credentials and financial obligations to the Institute are in order. Grade reports will be mailed to all students.

### RELEASE OF INFORMATION FROM STUDENT OFFICIAL ACADEMIC RECORDS

The Institute recognizes the responsibility for maintaining records for each student to preserve authentic evidence of the events and actions that are important and can contribute to the efforts to educate the student and to facilitate the achievement of the educational goals of the Institute. The following general principles and procedures govern the release of information from student official records:

1. Written consent of the student concerned is required before a transcript or information from his or her official record may be released. Exceptions to the above statement are outlined below:
  - a. The Registrar may release transcripts or information from official records including reports of academic standing to academic and administrative members of the Institute staff whose responsibilities require this information.
  - b. The Registrar may honor appropriate requests for public or directory information from student records which includes the following: student's name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of enrollment, degrees and awards received, and the most recent previous educational agency or institution attended by the student.

- c. The Registrar may release information pertaining to honor achievements for publication.
2. A student's identification photograph is available to Institute personnel only.
3. A hold may be applied to the release of a transcript, or other information requested from an official record, for a student who has an overdue indebtedness to the Institute. Such a student continues to have the right to see his official record upon request.
4. The use and release of information from student official records will be determined as outlined above and in compliance with state and federal legislation relating to such records. Action in situations that may not have been anticipated and/or defined above will at all times be based upon the best knowledge available to the professional staff of the Institute.

### Honor Roll for Curriculum Students

A regular student who is enrolled for at least six quarter hours of courses or the equivalent, receives no incompletes, and earns a grade point average of 3.0 or above is listed on the quarterly honor roll of the Institute.

### Incomplete

Assigned at the discretion of the instructor and approval of the Dean of Occupational Education for incomplete course work. For the course(s) where an I is assigned, hours will not be counted in quality point computation for that quarter; however, an I must be completed the following quarter, or it automatically becomes an F.

### ACADEMIC PROBATION

Upon the recommendations of an Admissions Committee, Randolph Technical Institute will place on probation for one quarter or semester, any student whose academic average drops below 1.5. If at any time a student's average drops below 2.0, he will be notified by the Student Services Office and be reminded that it will be necessary to have a 2.0 before he can graduate.

After his allotted time on probation, a student who is not off academic probation will be dismissed. In order to be re-admitted, a student must meet the requirements of the Admissions Committee.

## RE-ADMISSION OF STUDENTS

Students who have withdrawn in good standing or who have been suspended for academic difficulties or other reasons may request re-admission through Student Services.

In the case of re-admission, the individual's prior work is taken into consideration with all aspects of the open door policy being considered.

Specific re-admission policies include the following:

- (1) A student seeking re-admission must make his request known to Student Services at least one month before the quarter he wishes to attend.
- (2) Requests for re-admission will be reviewed by the admissions and disciplinary committee, consisting of the Dean of Student Services, Division Dean, Departmental Chairman and/or instructor concerned, and the Student Government President.
- (3) The Admissions Committee upon granting re-admission may impose certain restrictions such as, unit load, periodic grade reviews or other conditions it feels is in the best interest of the student.
- (4) A re-admitted student is subject to dismissal should he fail to meet the conditions stipulated by the admissions committee.

## REPEATING A COURSE

A student who fails a course will be required to repeat the course with a passing grade in order to graduate. Both grades made on the course will be counted in the total quality point average.

## WORK EXPERIENCE

Students enrolled in Commercial Graphics, Floral Design, Interior Design will be encouraged to seek employment in a related business or industry during the summer quarter between their first and second year of study. This work experience will greatly facilitate one's understanding relative to the application of those principles taught in the classrooms and labs.

## PRE-TECHNICAL DEVELOPMENTAL STUDIES

Certain pre-technical courses will be offered on an optional basis during the summer preceding the freshman year for those students who need developmental studies prior to entrance into the technical curriculum. Counseling and interview sessions prior to acceptance will determine if the student needs to enroll in the developmental studies.

## CONDUCT AND STANDARDS

Randolph Technical Institute has a genuine concern for the integrity of all students enrolled. Students are required to conduct themselves in a mature and responsible manner.

The following rules apply to all students who are enrolled in this institution:

1. Each student is held responsible for information published through notices and announcements placed on bulletin boards.
2. Students who negligently lose, damage, destroy, sell, or otherwise dispose of school property placed in their possession or entrusted to them will be charged for the full extent of the damage or loss and are subject to disciplinary action.
3. Under no conditions will alcoholic beverages, liquors, or narcotics be permitted in or on the school property. No one under the influence of alcohol or narcotics will be allowed on school premises. Any violation of this regulation will result in expulsion from the Institute on the first offense.
4. Students who engage in such acts as stealing, gambling, profane language, personal combat, and possession of firearms and dangerous weapons are liable to disciplinary action.
5. "Cleanliness is the sign of intelligence." Students are expected to make use of the disposal containers in the halls and in shops and classrooms at all times.
6. Students are expected to dress appropriately for the occasion.
7. Students are not to bring children to class with them.
8. Normal classroom discipline is the responsibility of the instructor, action of a more serious nature is handled by the Dean of Students. Any decision, whether made by an in-

structor or the Dean of Students, may be appealed through the Dean of Students to the President and the Board of Trustees. Such appeal should be in writing and need only to state the basic facts of the case.

9. Adequate parking facilities have been provided for students, faculty, and visitors. Students may not park in spaces reserved for faculty and staff personnel. Students may park in any other areas in either the east or west parking lots. No privately owned vehicles shall be parked in any service driveway or on the aprons around the vocational building. A maximum speed limit of 10 miles per hour should be followed by all who drive on school property. Vehicles belonging to students will be towed away at owner's expense if parked in assigned spaces or driveways.
10. Parking stickers are available in the Student Services office. The first one is free; any additional parking stickers are 25 cents each. Each student is responsible for registering his vehicle with this office.
11. Smoking may be permitted in various parts of the building dependent upon the activity and approval of the instructor. Smoking is **not** permitted at any time in the library or teaching theatre. Good housekeeping practices should be maintained.
12. An area has been provided for snacks and drinks. Students and staff shall consume these items in the places designated not in halls, shops, labs, and classrooms.
13. Students are not permitted to default in the payment of fees, fines, loans or other financial obligations due the school. All tuition and fees must be paid at the time of registration. Students having checks returned for insufficient funds may be required to make payments on a cash basis. Students with unpaid financial obligations to the school, and/or incomplete admissions applications will not be permitted to register for the upcoming quarter/semester, until all obligations are met. Under these circumstances where a student is not eligible to register at the regular time a late fee of \$5 will be charged. Transcripts and diplomas will not be released until all obligations are met.
14. Use of school facilities by students, organizations or clubs must be approved by the administration.
15. In matters pertaining to student conduct, dismissals, or dis-

ciplinary action, any student who feels he has been treated unjustly may present his case to the Dean of Student Services. If, after his case has been reviewed, he is still not satisfied, he may then request to meet with the Admissions and Discipline Committee. If the student then desires, he may request a hearing before the Institute president; if he is still not satisfied with the decision made by institutional personnel, he may request a hearing before the Board of Trustees, by submitting in written form a list of his grievances. In all cases, the Board of Trustees act as the final governing authority of the Institute. This grievance procedure in all Institute publications includes the following statement: A student must exercise his right of due process within ten (10) calendar days after presenting his case to the Dean of Student Services. This due process procedure must be finalized in a reasonable length of time.

#### **CLOSING OF SCHOOL DUE TO ADVERSE WEATHER**

In the event of inclement weather, we will adhere to the following policies:

##### **Adult Program, Day and Evening**

Programs will be canceled only by the President of the Institute or his designee. The decision of the Asheboro/Randolph County School Superintendent has no bearing on Randolph Technical Institute operating its adult program during inclement weather. Our decision will be broadcast by radio and television stations. Students and staff are requested **not** to call the administrative office. If you hear the announcement on radio and television, you can accept this as the Institute's procedure. Announcements will be made by 7:00 a.m. and 4:00 p.m. for the day and evening programs respectively.

##### **Permanent Full-Time and Permanent Part-Time Staff Member Responsibilities**

When **only** the classes for students are canceled, all faculty and staff members are expected to report to work or request annual leave by calling their supervisor.

When the Institute is closed, no student, faculty, or staff member is expected to report. In this case, no annual leave will be charged.

##### **Extra-Curricula Activities**

All extra-curricula activities will be canceled when it is necessary to cancel **classes** due to adverse weather. The person who is in charge of the activity will be responsible to reschedule it.

## **STUDENT ACTIVITIES**

Randolph Technical Institute attempts to provide extra-curricular activities for students since the Institute believes that such activities contribute to the overall growth and educational development of the individual. Sports such as volleyball, shuffleboard, softball, and table tennis are organized on an informal basis when students have free time. Organizations include the Circle K Service Club sponsored by the Kiwanis Club of Asheboro. Circle K membership is open to both men and women. The Interior Design Department maintains a student chapter of the American Society of Interior Designers (A.S.I.D.). Every department has the opportunity to form or expand a student club.

## **STUDENT GOVERNMENT**

All regular full-time students of the Institute are eligible to be represented through the student council. Each department elects one member of the class who serves on the student council. The student council formulates an annual budget from student activity fee proceeds, directs student elections, and holds regular meetings to promote the interests of students, to organize social events, and to participate in community activities.

## **CAMPUS FACILITIES**

The Institution is housed in modern air-conditioned facilities with 56,000 square feet of usable space available to meet the educational and developmental needs of the student.

The present facilities at Randolph Technical Institute consists of classrooms, shops, studio, learning resources center, teaching theater, administrative and student services.

Randolph Technical Institute is situated on a 25-acre campus, south of the business district in Asheboro. Located between 220 By-Pass and Fayetteville Street, the Institute is easily accessible from Highway 64 and 220. A campus addition of 16,000 square feet was completed for the 1974-75 school year. This new facility includes a student center, photography department, along with additional classrooms and labs.

## **CAMPUS STORE — FOOD SERVICE**

In an effort to provide facilities that will make the educational process more complete, Randolph Technical Institute provides an open campus store for its students.

A wide variety of supplies are carried in the campus store. In addition to the regular items, such as paper, pencils, portfolio, and drafting equipment, the store also carries such varied items as asbestos welding gloves, water colors, acrylic and oil paints, film, machine shop scales, and other student supplies. In addition to stocking the standard required text-books, a wide variety of paperback books are constantly in stock.

By providing such services, students at Randolph Technical Institute have a quick and usable supply of resource material to supplement both required text and resource library material.

In addition to the campus store, Randolph Technical Institute provides a campus food service for all students. Snacks and sandwich items are available.

## **LEARNING RESOURCES CENTER**

The Learning Resources Center is the modern concept of the technical institute library. The library concept has been expanded to include all of the various research and study facilities. The Randolph Technical Institute Learning Resources Center is housed in multipurpose quarters which feature a reading lounge area and a seating capacity of 28 students.

The center contains approximately 17,000 volumes primarily in the scientific and technical area, with new volumes being added each year to meet the need of expanding curriculums. The reference collection contains 10 sets of major encyclopedias and more than 300 specialized dictionaries, handbooks and reference books. The center subscribes to more than 188 periodicals of which about 50% are technical and trade, 15% professional and 35% general.

The center is open from 7:45 a.m. to 10:00 p.m. Monday through Thursday, 7:45 a.m. to 5:00 p.m. on Friday and 9:00 a.m. to 1:00 p.m. on Saturday with student library assistants and a librarian available to assist students in finding specific information, and to help those needing assistance in use of catalog or periodical indexes.

Every effort has been made at Randolph Technical Institute to provide an atmosphere in the center that is conducive to research and study. As Randolph Technical Institute grows, its Learning Resources Center will assume increasing importance in its total educational program.

# AREAS OF INSTRUCTION

## ONE-YEAR DIPLOMA PROGRAM

The institute offers six diploma programs. These one-year programs of study are designed to prepare students for entry employment in health-service and industrial occupations. These programs of study, which provide extensive skilled training in specific occupations, emphasize functional shop-laboratory work. Related technical and special general education instruction is offered through separate supporting courses or is integrated into the occupational content of these programs. Diploma programs offered at Randolph Technical Institute are: Automotive Mechanics, Electrical Maintenance, Machinist, Photofinishing Specialist, Practical Nursing, and Welding.

## TWO-YEAR ASSOCIATE DEGREE PROGRAMS

Randolph Technical Institute offers eleven two-year Associate Degree programs. These are designed to prepare students for professional and technical careers in business and industry and to give the student an opportunity to obtain the first two-years of a liberal education, which may be transferred to a four-year institution. Program context includes technical speciality courses, allied supporting subjects, and liberal courses.

### RECOMMENDED HIGH SCHOOL PREPARATION

#### ACCOUNTING

Business Mathematics, Economics, Business Courses

#### AUTOMOTIVE MECHANICS

Algebra or Modern Mathematics

#### BUSINESS ADMINISTRATION

Business Mathematics, Economics, Business Courses

#### COMMERCIAL GRAPHICS

Geometry, Art Courses

#### ELECTRICAL MAINTENANCE

Algebra or Modern Mathematics

#### ELECTRONICS ENGINEERING TECHNOLOGY

Geometry, Advanced Algebra, Trigonometry, Physics, and Mechanical Drawing Courses



#### FLORAL DESIGN AND MANAGEMENT TECHNOLOGY

Two Years Mathematics, Business Courses, Human Relations Course

#### GENERAL EDUCATION

Math, Science, Social Sciences

#### GENERAL OFFICE TECHNOLOGY

Business Mathematics, Business Courses

#### INTERIOR DESIGN

Home Economics, Art, and Mechanical Drawing Courses

#### MACHINIST

Algebra, Geometry

#### NURSING (LPN)

Modern Mathematics, Laboratory Science, Human Relations Course

#### PHOTOFINISHING SPECIALIST

Modern Mathematics, Science, Human Relations Course

#### PHOTOGRAPHY

Geometry, Chemistry, and Physics

#### SECRETARIAL SCIENCE (EXECUTIVE & LEGAL)

Business Mathematics, Business Courses

#### WELDING

Two Years High School Mathematics

## ART AND DESIGN

### COMMERCIAL GRAPHICS

#### Associate in Applied Science Degree

Commercial Graphics is designed to train an individual for the advertising design profession which deals with the design, illustration, and mechanical preparation of printed material that serves to promote the ideas, services, or products of organizations, institutions, or industrial firms. This curriculum will provide the student with a sound, competitive foundation for performing competently in the creative and/or the technical and mechanical areas of this field. The student receives training in communicating visually through the development of concept and the physical designs of advertising material, which may take such forms as newspaper or magazine ads, posters, folders, letterheads, corporate symbols, brochures, booklets, or package illustration. He is trained in the procedures and mechanics of preparing art for printing. In addition he receives actual practice in the mechanics of photo lettering and copy camera operations, the fundamentals of offset printing and press operations, conventional and photo-silkscreen printing, and the fundamentals of photography.

The Art and Design Department reserves the right to keep one project from each student's portfolio for its Permanent Student Work Collection.

Employment opportunities for the graduate may be found with the following:

- Advertising Agencies
- Art Studios
- Newspapers
- Television Studios
- Industrial Art Departments
- Department Stores
- Printing and Publishing Firms



## COMMERCIAL GRAPHICS

Course Title			Hours Per Week	Quarter Hours	
			Class	Lab.	Credit
<i>FIRST QUARTER</i>					
ENG	101	Technical Communications	3	0	3
DES	120	Life Drawing I	0	6	2
ART	101	History of Art I	3	0	3
DES	102	Design I	3	6	5
DFT	101	Technical Drafting	0	6	2
<i>Totals</i>			9	18	15
<i>SECOND QUARTER</i>					
ENG	102	Technical Communications	3	0	3
ART	111	History of Art II	3	0	3
DES	112	Design II	3	6	5
CGT	110	Lettering and Type	2	6	4
DES	220	Life Drawing II	0	6	2
<i>Totals</i>			11	18	17
<i>THIRD QUARTER</i>					
ENG	103	Report Writing	3	0	3
ART	121	History of Art III	3	0	3
DES	122	Design III	3	6	5
CAT	125	Commercial Art I	2	6	4
MAT	111	Basic Mathematics	5	0	5
<i>Totals</i>			16	12	20

## FOURTH QUARTER

ENG	204	Oral Communications	3	0	3
CAT	207	Commercial Art II	2	9	5
CGT	214	Graphic Arts I	2	9	5
CAT	101	Advertising Principles	3	0	3
<i>Totals</i>			10	18	16

## FIFTH QUARTER

CAT	209	Commercial Art III	3	6	5
CGT	216	Graphic Arts II	3	6	5
CGT	218	Illustration	2	6	4
PSY	209	Social Aspect of Advertising	3	0	3
<i>Totals</i>			11	18	17

## SIXTH QUARTER

CAT	211	Commercial Art IV	3	6	5
CGT	222	Graphic Arts III	3	6	5
CAT	116	Photography I	2	6	4
		Social Science Elective	3	0	3
<i>Totals</i>			11	18	17

## SEVENTH QUARTER (Summer)

CGT	220	Illustration	2	9	5
CAT	223	Special Design Projects	3	9	6
CAT	217	Photography II	2	6	4
Totals			7	24	15
Total Quarter Hours Credit					1

## INTERIOR DESIGN

### Associate in Applied Science Degree

The Interior Design curriculum is designed to prepare students for a variety of job opportunities in the field of design. The curriculum is based upon the fact that today's residential and commercial interiors must creatively express contemporary living. The study of historical styles as well as currently manufactured products, coordination of color, furniture, floor coverings, fabrics, wallpapers, drapery, paneling, hardware, paints and accessories is an integral part of the course. The student has the opportunity to cover the elements of interior design and to demonstrate his abilities in interior coordination. Beautiful, functional interiors must be sold as well as created and to assist the student in this area, courses are included in sales development, psychology, and other related courses.

Graduates of this program may qualify for various positions with the following types of employers:

Furniture Manufacturers

Architects

Furniture Design Studios

Photography Studios

Interior Design Studios

Interior Furnishings Dealer



## INTERIOR DESIGN

Course Title			Hours Per Week		Quarter
			Class	Lab.	Hours Credit
FIRST QUARTER					
ENG	101	Technical Communications	3	0	3
ART	101	History of Art I	3	0	3
DES	102	Design I	3	6	5
DFT	101	Technical Drafting	0	6	2
DES	108	Basic Drawing	2	4	4
Totals			11	16	17
SECOND QUARTER					
ENG	102	Technical Communications	3	0	3
ART	111	History of Art II	3	0	3
DES	112	Design II	3	6	5
DFT	108	Architectural Drafting	0	6	2
DES	125	Color Theory and Application	2	4	4
Totals			11	16	17
THIRD QUARTER					
ENG	103	Report Writing	3	0	3
ART	121	History of Art III	3	0	3
DES	122	Design III	3	6	5
DFT	140	Layout Drafting	0	6	2
MAT	111	Basic Mathematics	5	0	5
Totals			14	12	18

## FOURTH QUARTER

ENG	204	Oral Communications	3	0	3
DES	203	Introduction to Interior Design	2	9	5
DES	207	Introduction to Fabrics	2	2	3
DES	205	Period Styles in Furniture Decorating to Renaissance	5	0	5
<i>Totals</i>			12	11	16

## FIFTH QUARTER

DES	212	Residential Design	2	9	5
DES	121	Market Materials	2	2	3
SSC	232	Social History of Furniture and Decorating	3	0	3
DES	223	Survey of Decorative Arts	3	0	3
DES	206	Furniture Design and Construction	2	4	3
<i>Totals</i>			12	15	17

## SIXTH QUARTER

DES	222	Residential Design	2	9	5
BUS	236	Business Practices & Principles for Interior Design	3	0	3
DES	231	Commercial Design	2	9	5
DES	241	Survey of Twentieth Century Design	3	0	3
		Social Science Elective	3	0	3
<i>Totals</i>			13	18	19

## SEVENTH QUARTER (Summer)

DES	260	Special Projects	2	12	6
DES	262	Commercial Design	2	12	6
<i>Totals</i>			4	24	12

Total Quarter Hours Credit 116

## BUSINESS

### ACCOUNTING

#### Associate in Applied Science Degree

The Accounting Program is designed to provide an intensive study in basic and advanced accounting techniques, preparing cost data and taxes, and to develop an understanding of our economy through study and analysis of the role of manufacturing and marketing, an understanding of the principles of organization and management in business operations, and a knowledge in specific elements of finance and business law.

Oral and written communications and knowledge of human relations as applied to successful business operations are emphasized in this program.

Successful completion of the course will allow the graduate to enter one of the fastest growing fields of the modern business world and should help open the door to additional opportunities. Business students may be exempted from various required courses as outlined in the suggested program in the college catalog. Exemptions will be based on an evaluation of past records and/or level of competence in the area in question, by the student's advisor/instructor. When a student is exempted from a required course, the advisor/instructor may recommend to the Business Department Chairman and the Dean of Student Services, that credit hours be granted or that the student take other course work which would benefit the student in lieu of exempted courses.



## BUSINESS

## ACCOUNTING

Course Title			Hours Per Week		Quarter Hours Credit
			Class	Lab.	
<i>FIRST QUARTER</i>					
ENG	101	Technical Communications	3	0	3
MAT	110	Business Mathematics	5	0	5
BUS	101	Introduction to Business	5	0	5
BUS	110	Office Machines	2	2	3
BUS	120	Accounting I	5	2	6
<i>Totals</i>			20	4	22
<i>SECOND QUARTER</i>					
ENG	102	Technical Communications	3	0	3
ECO	102	Economics I	3	0	3
BUS	102	Typewriting I	2	3	3
BUS	115	Business Law I	3	0	3
BUS	121	Accounting II	5	2	6
<i>Totals</i>			16	5	18
<i>THIRD QUARTER</i>					
ENG	103	Report Writing	3	0	3
ECO	104	Economics II	3	0	3
BUS	116	Business Law II	3	0	3
BUS	122	Accounting III	5	2	6
EDP	104	Introduction to Data Processing	3	2	4
<i>Totals</i>			17	4	19

### FOURTH QUARTER

ENG	204	Oral Communications	3	0	3
BUS	123	Business Finance	3	0	3
BUS	222	Intermediate Accounting I	4	2	5
BUS	225	Cost Accounting	3	2	4
BUS	229	Taxes I	3	2	4
<i>Totals</i>			16	6	19

### FIFTH QUARTER

ENG	206	Business Communications	3	0	3
BUS	223	Intermediate Accounting II	4	2	5
BUS	230	Taxes II	3	2	4
BUS	235	Business Management	3	2	4
		Social Science Elective	3	0	3
<i>Totals</i>			16	6	19

### SIXTH QUARTER

BUS	269	Auditing	3	2	4
BUS	271	Office Management	3	2	4
BUS	272	Principles of Supervision	3	0	3
		Business Elective	3	0	3
		Social Science Elective	3	0	3
<i>Totals</i>			15	4	17

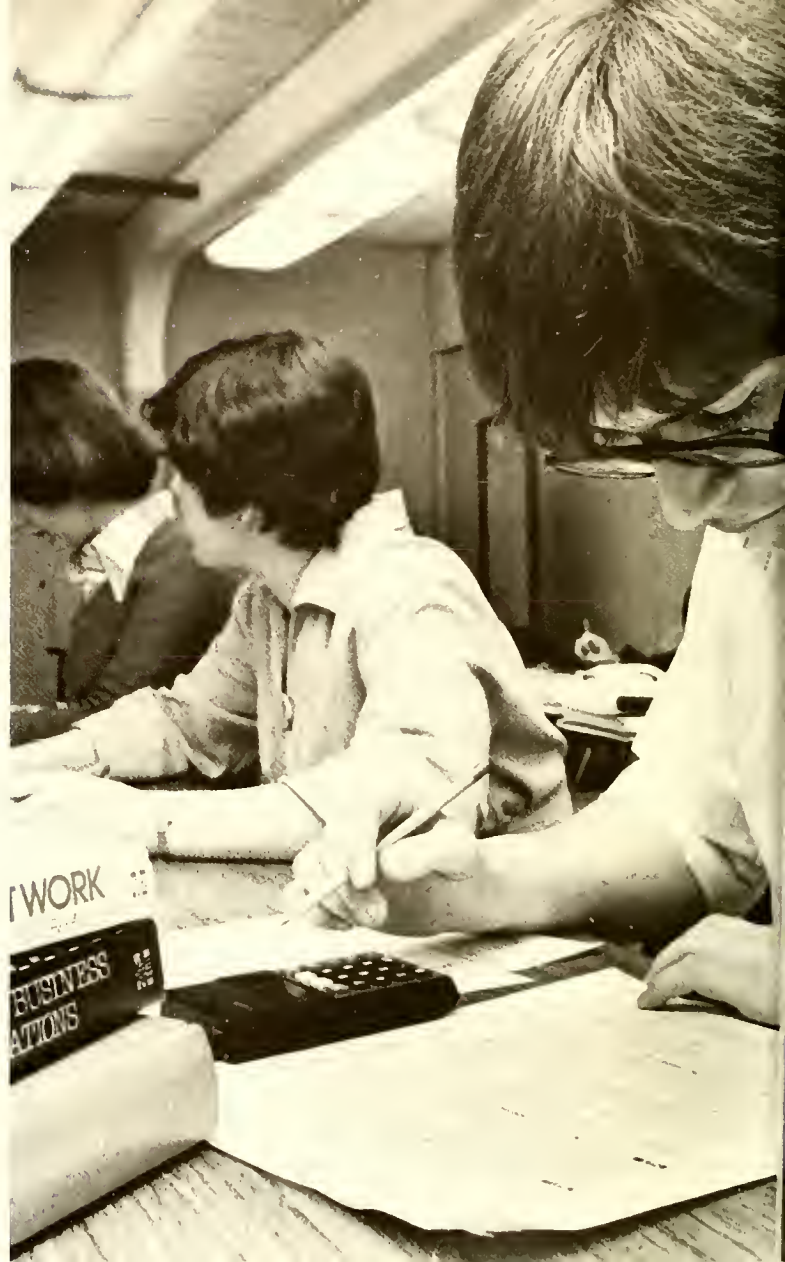
Total Quarter Hours Credit 114

## BUSINESS ADMINISTRATION

### Associate in Applied Science Degree

The Business Administration Program offers the student a well-rounded business and general education program designed to prepare him in the many phases of administrative work encountered in the average business office.

Some specific objectives of the program include an understanding of the principles of organization and management in business, an understanding of our economy through the study of marketing and manufacturing, gaining skills in effective human relations, and gaining knowledge in accounting, finance, and business law. The development of effective communications skills is also emphasized.



## BUSINESS ADMINISTRATION

Course Title				Hours Per Week		Quarter Hours Credit
				Class	Lab.	
<i>FIRST QUARTER</i>						
ENG	101	Technical Communications		3	0	3
MAT	110	Business Mathematics		5	0	5
BUS	101	Introduction to Business		5	0	5
BUS	110	Office Machines		2	2	3
BUS	120	Accounting I		5	2	6
<i>Totals</i>				20	4	22
<i>SECOND QUARTER</i>						
ENG	102	Technical Communications		3	0	3
ECO	102	Economics I		3	0	3
BUS	102	Typewriting		2	3	3
BUS	115	Business Law I		3	0	3
BUS	121	Accounting II		5	2	6
<i>Totals</i>				16	5	18
<i>THIRD QUARTER</i>						
ENG	103	Report Writing		3	0	3
ECO	104	Economics II		3	0	3
BUS	116	Business Law II		3	0	3
BUS	122	Accounting III		5	2	6
BUS	239	Marketing		5	0	5
<i>Totals</i>				19	2	20

### *FOURTH QUARTER*

ENG	204	Oral Communications	3	0	3
BUS	123	Business Finance	3	0	3
BUS	229	Taxes I	3	2	4
BUS	232	Sales Development	3	0	3
EDP	104	Introduction to Data Processing	3	2	4
<i>Totals</i>			15	4	17

### *FIFTH QUARTER*

ENG	206	Business Communications	3	0	3
BUS	230	Taxes II	3	2	4
BUS	235	Business Management	3	2	4
		Social Science Elective	3	0	3
		Business Elective	3	0	3
<i>Totals</i>			15	4	17

### *SIXTH QUARTER*

BUS	271	Office Management	3	2	4
BUS	272	Principles of Supervision	3	0	3
		Social Science Elective	3	0	3
		Business Elective	3	0	3
		Business Elective	3	0	3
<i>Totals</i>			15	2	16

Total Quarter Hours Credit 110

## EXECUTIVE SECRETARY

### Associate in Applied Science Degree

The Executive Secretarial Program is designed to offer the student the skills necessary in becoming an efficient secretary — competent in oral and written communications, typing, filing, taking and transcribing dictation, and the operating of the most up-to-date office machines.

Specialized training in skill areas is supplemented by related courses in mathematics, accounting, and business law. Desirable personal habits, ability to get along with others, and an awareness of business procedures and trends are emphasized in the program.

Secretarial students may be exempted from various required courses as outlined in the suggested program in the college catalog. Exemptions will be based on an evaluation of past records and/or level of competence in the area in question, by the student's advisor/instructor. When a student is exempted from a required course, the advisor/instructor may recommend to the Business Department Chairman and the Dean of Student Services, that credit hours be granted or that the student take other course work which would benefit the student in lieu of exempted courses.



## EXECUTIVE SECRETARY

Course Title			Hours Per Week	Quarter Hours
			Class	Lab. Credit
<i>FIRST QUARTER</i>				
ENG	101	Technical Communications	3	0 3
MAT	110	Business Mathematics	5	0 5
BUS	101	Introduction to Business	5	0 5
BUS	102	Typewriting I	2	3 3
BUS	106	Shorthand I	3	2 4
<i>Totals</i>			18	5 20
<i>SECOND QUARTER</i>				
ENG	102	Technical Communications	3	0 3
BUS	103	Typewriting II	2	3 3
BUS	107	Shorthand II	3	2 4
BUS	110	Office Machines	2	2 3
BUS	120S	Accounting I	5	2 6
<i>Totals</i>			15	9 19
<i>THIRD QUARTER</i>				
ENG	103	Report Writing	3	0 3
BUS	104	Typewriting III	2	3 3
BUS	108	Shorthand III	3	2 4
BUS	112	Records Management	3	2 4
BUS	121S	Accounting II	5	2 6
<i>Totals</i>			16	9 20

## FOURTH QUARTER

ENG	204	Oral Communications	3	0 3
BUS	205	Advanced Typewriting	2	3 3
BUS	206	Dictation and Transcription I	3	2 4
BUS	211	Advanced Office Machines	2	2 3
EDP	104	Introduction to Data Processing	3	2 4
<i>Totals</i>			13	9 17

## FIFTH QUARTER

ENG	206	Business Communications	3	0 3
BUS	115	Business Law I	3	0 3
BUS	207	Dictation and Transcription II	3	2 4
BUS	212	Machine Transcription I	2	2 3
BUS	214A	Secretarial Procedures and Administration I	3	2 4
		Social Science Elective	3	0 3
<i>Totals</i>			17	6 20

## SIXTH QUARTER

BUS	208	Dictation and Transcription III	3	2 4
BUS	214B	Secretarial Procedures and Administration II	3	2 4
BUS	229	Taxes I	3	2 4
PSY	112	Personality Development	3	0 3
		Business Elective	3	0 3
<i>Totals</i>			15	6 18

Total Quarter Hours Credit 114

## GENERAL OFFICE TECHNOLOGY

### Associate in Applied Science Degree

More people are now employed in clerical occupations than in any other single job category. Automation and increased production will mean that these people will need more technical skills and a greater adaptability for diversified types of jobs.

The General Office Technology Program is designed to offer the student the necessary variety of skills for employment in the business world — competency in oral and written communications, typing, filing, machine transcription, and the operation of the most up-to-date office machines.

Specialized training in skill areas is supplemented by related courses in mathematics, accounting, and business law. Desirable personal habits, ability to get along with others, and an awareness of business procedures and trends are emphasized in the program.

Business students may be exempted from various required courses as outlined in the suggested program in the college catalog. Exemptions will be based on an evaluation of past records and/or level of competence in the area in question by the student's advisor/instructor. When a student is exempted from a required course, the advisor/instructor may recommend to the Business Department Chairman and the Dean of Student Services, that credit hours be granted or that the student take other course work which would benefit the student in lieu of exempted courses.



## GENERAL OFFICE TECHNOLOGY

Course Title			Hours Per Week		Quarter Hours Credit
			Class	Lab.	
FIRST QUARTER					
ENG	101	Technical Communications	3	0	3
MAT	110	Business Mathematics	5	0	5
BUS	101	Introduction to Business	5	0	5
BUS	102	Typewriting I	2	3	3
BUS	110	Office Machines	2	2	3
Totals			17	5	19

### *SECOND QUARTER*

ENG 102 Technical Communications	3	0	3
BUS 103 Typewriting II	2	3	3
BUS 120S Accounting I	5	2	6
BUS 115 Business Law I	3	0	3
ECO 102 Economics	3	0	3
<i>Totals</i>	16	5	18

### *THIRD QUARTER*

ENG 103 Report Writing	3	0	3
BUS 104 Typewriting III	2	3	3
BUS 112 Records Management	3	2	4
BUS 116 Business Law II	3	0	3
BUS 121S Accounting II	5	2	6
<i>Totals</i>	16	7	19

### *FOURTH QUARTER*

ENG 204 Oral Communications	3	0	3
BUS 205 Advanced Typewriting	2	3	3
BUS 211 Advanced Office Machines	2	2	2
BUS 232 Sales Development	3	0	3
EDP 104 Introduction to Data Processing	3	2	4
<i>Totals</i>	13	7	16

### *FIFTH QUARTER*

ENG 206 Business Communications	3	0	3
BUS 210 Executive Office Typing	2	3	3
BUS 212 Machine Transcription I	2	2	3
BUS 214A Secretarial Procedures and Administration I	3	2	4
Social Science Elective	3	0	3
Business Elective	3	0	3
<i>Totals</i>	16	7	19

### *SIXTH QUARTER*

BUS 214B Secretarial Procedures and Administration II	3	2	4
BUS 229 Taxes I	3	2	4
BUS 213 Machine Transcription II	2	4	4
PSY 112 Personality Development	3	0	3
Business Elective	3	0	3
<i>Totals</i>	14	8	18

Total Quarter Hours Credit 109

## LEGAL SECRETARY

### Associate in Applied Science Degree

The Legal Secretary Program is designed to provide specialized training in the accepted procedures required by the legal profession and to enable persons to become proficient soon after accepting employment in the legal office.

The program offers the students the necessary secretarial skills to develop competencies in oral and written communications, typing, filing, taking and transcribing dictation, and the operating of the most up-to-date office machines.

Specialized training in skill areas is supplemented by related courses in mathematics, accounting, and business law. Desirable personal habits, ability to get along with others, and an awareness of business procedures and trends are emphasized in the program.

Legal secretarial students may be exempted from various required courses as outlined in the suggested program in the college catalog. Exemptions will be based on an evaluation of past records and/or level of competence in the area in question, by the student's advisor/instructor. When a student is exempted from a required course, the advisor/instructor may recommend to the Business Department Chairman and the Dean of Student Services, that credit hours be granted or that the student take other course work which would benefit the student in lieu of exempted courses.



## LEGAL SECRETARY

Course Title			Hours Per Week	Quarter Hours	
			Class	Lab.	Credit
<i>FIRST QUARTER</i>					
ENG	101	Technical Communications	3	0	3
MAT	110	Business Mathematics	5	0	5
BUS	101	Introduction to Business	5	0	5
BUS	102	Typewriting I	2	3	3
BUS	106	Shorthand I	3	2	4
<i>Totals</i>			18	5	20
<i>SECOND QUARTER</i>					
ENG	102	Technical Communications	3	0	3
BUS	103	Typewriting II	2	3	3
BUS	107	Shorthand II	3	2	4
BUS	110	Office Machines	2	2	3
BUS	120S	Accounting I	5	2	6
<i>Totals</i>			15	9	19
<i>THIRD QUARTER</i>					
ENG	103	Report Writing	3	0	3
BUS	104	Typewriting III	2	3	3
BUS	108	Shorthand III	3	2	4
BUS	112	Records Management	3	2	4
BUS	121S	Accounting II	5	2	6
<i>Totals</i>			16	9	20

## *FOURTH QUARTER*

ENG	204	Oral Communications	3	0	3
BUS	205	Advanced Typewriting	2	3	3
BUS	206	Dictation and Transcription I	3	2	4
BUS	211	Advanced Office Machines	2	2	3
EDP	104	Introduction to Data Processing	3	2	4
<i>Totals</i>			13	9	17

## *FIFTH QUARTER*

ENG	206	Business Communications	3	0	3
BUS	115	Business Law I	3	0	3
BUS	207	Dictation and Transcription II	3	2	4
BUS	212	Machine Transcription I	2	2	3
BUS	214A	Secretarial Procedures and Administration I	3	2	4
		Social Science Elective	3	0	3
<i>Totals</i>			17	6	20

## *SIXTH QUARTER*

BUS	116	Business Law II	3	0	3
BUS	208	Dictation and Transcription III	3	2	4
BUS	214B	Secretarial Procedures and Administration II	3	2	4
PSY	112	Personality Development	3	0	3
		Business Elective	3	0	3
<i>Totals</i>			15	4	17

Total Quarter Hours Credit 113

## ELECTRONICS ENGINEERING TECHNOLOGY

### Associate in Applied Science Degree

The Electronics Engineering Technology program is designed to provide a basic background in science, mathematics, and electronics theory and practice. Emphasis is on the development and growth of professional and technical competence on the part of the individual student. Entry level employment includes:

- Electronic Engineering Technician
- Computer Maintenance Technician
- Radio and TV Control Room Operator
- Electromechanical Technician
- Instrument Mechanic Technician
- Communications Technician
- Telemetry Technician
- Industrial Electronics Technician
- Technical Writer
- Production Technician

The broad technical training provided in this curriculum, along with additional experience gained on the job, will enable the graduate to advance to positions of increasing responsibility in the electronics industry.



## ELECTRONICS ENGINEERING TECHNOLOGY

Course Title			Hours Per Week		Quarter Hours Credit
			Class	Lab.	
FIRST QUARTER					
ENG	101	Technical Communications	3	0	3
MAT	101	Technical Mathematics	5	0	5
ELC	112	Electrical Fundamentals I	5	6	7
ELN	104	Introduction to Electronic Data Processing Systems	3	2	4
Totals			16	8	19

<i>SECOND QUARTER</i>					
ENG	102	Technical Communications	3	0	3
MAT	102	Technical Mathematics	5	0	5
ELC	113	Electrical Fundamentals II	5	6	7
ELN	121	Electronics I	3	4	5
<i>Totals</i>			16	10	20

<i>THIRD QUARTER</i>					
ENG	103	Report Writing	3	0	3
MAT	103	Technical Mathematics	5	0	5
ELN	122	Electronics II	5	6	7
DFT	101	Technical Drafting	0	6	2
<i>Totals</i>			13	12	17

<i>FOURTH QUARTER</i>					
ENG	204	Oral Communications	3	0	3
ELC	114	Electrical Fundamentals III	3	2	4
ELN	123	Electronics III	3	4	5
DFT	102	Technical Drafting	0	6	2
<i>Totals</i>			9	12	14

### *FIFTH QUARTER*

MAT	201	Technical Mathematics	5	0	5
PHY	101	Physics: Properties of Matter	3	2	4
ELN	220	Electronic Systems I	4	4	5
ELN	218	Pulse, Logic, and Digital Circuits	3	4	5
<i>Totals</i>			15	10	19

### *SIXTH QUARTER*

Social Science Elective			3	0	3
PHY	102	Physics: Work, Energy, Power	3	2	4
ELN	222	Electronic Systems II (Specialized Elective)	5	4	7
ELN	219	Digital Fundamentals	3	4	5
<i>Totals</i>			14	10	19

### *SEVENTH QUARTER*

Social Science Elective			3	0	3
PHY	104	Physics: Light and Sound	3	2	4
ELN	246	Electronics Design Project	0	6	3
ELN	224	Electronics Systems III (Specialized Elective)	5	4	7
<i>Totals</i>			11	12	17

Total Quarter Hours Credit      125

## FLORAL DESIGN

### Associate in Applied Science Degree

The Floral Design and Management curriculum is designed to prepare students for entry into the expanding floral industry.

This curriculum emphasizes not only the acquisition of the art of buying and arranging flowers and the management of a retail flower shop, but the art of salesmanship, effective communications, and sound business management. The program is designed to prepare the graduate for the following job opportunities:

Flower Buyer

Floral Designer

Floral Sales

Flower Shop Supervisor

Retail Manager-Owner

The broad management and floral training provided in this curriculum, along with experiences gained on the job, should provide the graduate with adequate skills for a worthwhile position in the floral industry.



## FLORAL DESIGN

Course Title	Hours Per Week	Quarter Hours
	Class	Lab. Credit

### FIRST QUARTER

ENG 101	Technical Communications	3	0	3
FLO 101	Floral Design I	3	4	5
FLO 112	Floral Art and Color	3	0	3
AGR 185	Soil Science Fertilizers	3	2	4
MAT 110	Business Mathematics	5	0	5
<i>Totals</i>		17	6	20

### SECOND QUARTER

ENG 102	Technical Communications	3	0	3
FLO 102	Floral Design II	2	4	4
HOR 150	General Horticulture	3	2	4
HOR 160	Plant Identification I	5	0	5
BUS 102	Typewriting	2	3	3
<i>Totals</i>		15	9	19

### THIRD QUARTER

ENG 103	Report Writing	3	0	3
FLO 103	Floral Design III	2	5	4
HOR 161	Plant Identification II	3	0	3
HOR 170	Plant Disease and Pest Control	5	2	6
HOR 254	Plant Propagation	2	4	4
<i>Totals</i>		15	11	20

### FOURTH QUARTER (Summer)

FLO 199	Work Experience and Assignment in Exotic House Plants	<i>Totals</i>	0	40	4
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### FIFTH QUARTER

ENG 204	Oral Communications	3	0	3
FLO 204	Floral Design IV	3	6	6
FLO 221	Specialty Purchasing	3	0	3
HOR 230	Landscape Maintenance	2	4	4
BUS 232	Sales Development	3	0	3
<i>Totals</i>		14	10	19

### SIXTH QUARTER

HOR 251	Landscape Planning I	2	2	3
HOR 256	Nursery Plants and Flower Production	3	0	3
FLO 205	Floral Design V	2	8	6
BUS 120	Accounting	5	2	6
BUS 281	Human Relations in Business	3	0	3
<i>Totals</i>		15	12	21

### SEVENTH QUARTER

HOR 252	Landscape Planning II	2	4	2
FLO 206	Floral Design VI	2	4	4
FLO 237	Floral Shop Operation and Management	4	6	7
	Social Science Elective	3	0	3
<i>Totals</i>		11	14	16

<i>Total Quarter Hours Credit</i>	119
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## GENERAL EDUCATION

This program is a cooperative effort between Randolph Technical Institute, Asheboro, North Carolina, and the University of North Carolina (UNC) at Greensboro, North Carolina.

The two main objectives of this program are to provide the student with a general education in the humanities and social science, and/or to provide the student with the freshman and sophomore level of course work leading to the four-year baccalaureate degree. Students enrolled in this program will be students at Randolph Technical Institute. They will be pursuing select first-and second-year courses with the option to transfer to a four-year institution. Students may earn up to 64 hours credit, plus two hours of Physical Education.

During a period of two years, Randolph Technical Institute will endeavor to offer each of the following courses at least once.

Due to the fact that RTI varies the offerings from semester to semester, the courses are listed according to the categories of Natural Science and Mathematics, Social and Behavioral Sciences, Humanities, and general courses for electives or Liberal Education requirements.

A student should note that either ENG 101 or ENG 102 is required of all programs. In addition to this, the student should consult the catalog of the four-year institution he wishes to enter to determine specific requirements for his major. To assist students, RTI employs an academic advising system in which each student consults his advisor before he is allowed to register.

RTI offers the regular two semesters, both day and evening courses, and a summer session.

### ADMISSION REQUIREMENTS

A high school diploma or its equivalent is required of each enrollee.

The institute will administer the Differential Aptitude Test (DAT) as a part of the admissions requirements.



Credits earned in this program are recorded on transcripts at UNC at Greensboro. Evaluation for transfer purposes will be made from these transcripts by the college or university to which the request for transfer is made.

These courses are transferable to all 4-year institutions which accept extension credits from UNC at Greensboro.

## GENERAL EDUCATION

Course Title			Hours Per Week	Semester Hours	
			Class	Lab.	Credit
<b>SOCIAL AND BEHAVIORAL SCIENCES</b>					
HIS	101	Modern European History	3	0	3
HIS	102	Modern European History	3	0	3
HIS	211	The United States	3	0	3
HIS	212	The United States	3	0	3
PSY	221	General Psychology	3	0	3
PSC	105	Political Analysis	3	0	3
ATY	101	Man in Nature	3	0	3
ECO	201	Introductory Microeconomics and Social Issues	3	0	3
ECO	202	Introductory Macroeconomics and Social Issues	3	0	3
SOC	211	Introduction to Sociology	3	0	3
<b>NATURAL SCIENCE AND MATHEMATICS</b>					
MAT	101	Developmental Math	3	0	0
MAT	110	Introduction to Mathematics I	3	0	3
MAT	112	Introduction to Mathematics II	3	0	3
BIO	101	Principles of Biology	2	3	3
BIO	102	Principles of Biology	2	3	3
CHE	103	General Descriptive Chemistry	3	0	3
GEO	211	Physical Geography	2	3	3
GEO	212	Physical Geography	2	3	3

## HUMANITIES

ENG	105	Approach to Fiction	3	0	3
ENG	211	English Literature	3	0	3
ENG	212	English Literature	3	0	3
ART	105	Introduction to Art	3	0	3
PHI	111	Introduction to Philosophy	3	0	3
PHI	115	Elementary Logic	3	0	3
ENG	251	American Literature	3	0	3
ENG	252	American Literature	3	0	3

## LIBERAL EDUCATION COURSES

ENG	101	English Composition	3	0	3
ENG	102	English Composition	3	0	3
HEA	101	Health	3	0	3
FRE	101	Elementary French	3	0	3
FRE	102	Elementary French	3	0	3
PE	161	Beginning Tennis	3	0	1
PE	266	Beginning Bowling	3	0	1
PE	163	Volleyball	3	0	1
PE	123	Softball	3	0	1

## PHOTOGRAPHY

### PHOTOFINISHING SPECIALIST

#### Diploma Program

The Photofinishing Specialist Program offers training in the production, control, and management techniques used in the photofinishing, professional finishing, and school finishing industries. A thorough introduction to the photographic process is followed by study of the design, operation, maintenance, and modification of the automated equipment currently used in mass production of photographic negatives, prints, and transparencies. Strong emphasis is placed on quality control and efficient production. The student may elect, with consent of the faculty, to enroll for three additional quarters during which emphasis is placed on actual production management and the student's preparation to enter photofinishing employment at a middle-management level.

#### Employment opportunities include:

- Automatic Printer Operator
- Automatic Processor Operator
- Print Inspector
- Laboratory Maintenance Specialist
- Quality Control Specialist
- Custom Printing Specialist
- Photofinishing Plant Supervisor
- Equipment Service Representative
- Print Retouching Specialist
- Production Supervisor
- Film Editor



## PHOTOFINISHING SPECIALIST

Course Title			Hours Per Week		Quarter Hours Credit
			Class	Lab.	
FIRST QUARTER					
PHO	107	Fundamentals of Photography	3	9	6
PHO	105	Photochemistry	3	3	4
PHO	110	Process Control	3	6	6
PHO	121	Industrial Technology I	3	0	3
MAT	110	Business Mathematics	5	0	5
Totals			17	18	24

### SECOND QUARTER

PHO 115 Materials and Processes I	3	3	4
PHO 112 Introduction to Machine Processing	2	6	4
PHO 118 Automated Machine Printing	3	9	6
ENG 109 Communication Skills	3	0	3
Social Science	3	0	3
<i>Totals</i>	14	18	20

### THIRD QUARTER

PHO 117 Materials and Processes II	3	3	4
PHO 120 Automated Photographic Processes	2	18	8
ENG 111 Communication Skills	3	0	3
Social Science	3	0	3
<i>Totals</i>	11	21	18

### FOURTH QUARTER (Summer)

PHO 122 Automated Printing Mechanics	2	12	8
PHO 126 Photographic Machine Maintenance	2	12	6
PHO 123 Industrial Technology II	2	0	2
<i>Totals</i>	6	24	16

### FIFTH QUARTER (Optional)

PHO 119 Custom Finishing	2	8	6
PHO 131 Production Technique I	0	15	5

#### ELECTIVES

PHO 135 Assignment Production	0	6	2
PHO 137 Photographic Market Research	0	6	2
<i>Totals</i>	2	23-29	11-13

### SIXTH QUARTER (Optional)

PHO 133 Production Technique II	0	30	10
ELN 213 Electronic Imaging Systems	3	0	3

#### ELECTIVES

PHO 135 Assignment Production	0	6	2
PHO 137 Photographic Market Research	0	6	2
<i>Totals</i>	3	30-36	13-15

**Total Quarter Hours Credit 78**

**Electives (Minimum) 6**

**Totals 84**

## PHOTOGRAPHY GENERALIST

Associate in Applied Science Degree

The Photography Generalist Curriculum offers training in comprehensive photographic technique and its application in the major professional areas. In the first year emphasis is placed on mastery of medium and large format cameras; study of black-and-white and color materials and their response to exposure, development, and fixation; and practice in laboratory methods in general use in the industry. During the second year emphasis is placed on specific professional applications of varied formats, lighting techniques, studio procedures, laboratory production and quality assurance, costing methods, supporting crafts, etc. Visual studies, industrial technology, and business courses further prepare the student to meet the diverse challenges of a career in photography.

Employment opportunities include:

- Advertising and Promotional Photography
- Architectural Photography
- Industrial Photography
- News and Magazine Photography
- Photographic Equipment Sales
- Portrait Photography
- Product Illustration and Catalog Photography
- Public Relations and Visual Presentations Photography
- School Photography
- Wedding Photography



# PHOTOGRAPHY GENERALIST

Course Title			Hours Per Week	Quarter Hours	
			Class	Lab.	Credit
<i>FIRST QUARTER</i>					
PHO	107	Fundamentals of Photography	3	9	6
PHO	105	Photochemistry	3	3	4
PHO	121	Industrial Technology I	3	0	3
ENG	101	Technical Communications	3	0	3
MAT	110	Business Math	5	0	5
<i>Totals</i>			17	12	21
<i>SECOND QUARTER</i>					
PHO	109	Large Format Photography I	3	9	6
PHO	115	Materials and Processes I	3	3	4
PHO	102	Visual Studies I	2	6	5
		Social Science	3	0	3
ENG	102	Technical Communications	3	0	3
<i>Totals</i>			14	18	21
<i>THIRD QUARTER</i>					
PHO	111	Large Format Photography II	3	9	6
PHO	117	Materials and Processes II	3	3	4
		Social Science	3	0	3
PHO	104	Visual Studies II	2	6	5
ENG	103	Report Writing	3	0	3
<i>Totals</i>			14	18	21
<i>FOURTH QUARTER (Summer)</i>					
PHO	214	Small Format Photography	4	12	8
PHO	106	Visual Studies III	2	6	5
ENG	204	Oral Communications	3	0	3
PHO	123	Industrial Technology II	2	0	2
<i>Totals</i>			11	18	18

## FIFTH QUARTER

\*PHO 199 Controlled Work Experience *Totals* 11 346 6

\*Dependent upon availability of appropriate student employment opportunities within the photographic industry.

## SIXTH QUARTER

PHO 216 Professional Fields of Photography I 4 18 10

ELN 213 Electronic Imaging Systems 3 0 3

### ELECTIVES:

PHO 227 Graphic Arts Survey 2 0 2

PHO 240 Portfolio Development 0 6 2

PHO 137 Photographic Market Research 0 6 2

*Totals* 9 18-24 15-17

## SEVENTH QUARTER

PHO 220 Professional Fields of Photography II 3 21 10

### ELECTIVES:

PHO 251 History of Photography 2 0 2

PHO 128 Survey of Automated Processes 2 0 2

PHO 244 Small Studio Crafts 0 6 2

PHO 240 Portfolio Development 0 6 2

PHO 137 Photographic Market Research 0 6 2

*Totals* 5-7 21-27 14-16

Total Quarter Hours Credit 104

Controlled Work Experience 6

Electives (Minimum) 6

*Totals* 116

## AUTOMOTIVE MECHANICS

### Diploma Program

The Automotive Mechanics Program of studies prepares students for entry employment as automotive mechanics. The program emphasizes practical shop experience to develop mechanical and technical skills. Related technical instruction covers the functional principles and operational characteristics of the components of a modern automobile.

Instructional units are devoted to automotive fundamentals, engines, automotive electrical and fuel systems, automotive chassis and power train units, automotive air-conditioning, chassis and suspension systems, and general repair and servicing practices. Successful completion of the program allows individuals to enter the following occupational fields:

- Auto Mechanic
- Parts Manager
- Truck Mechanic
- Maintenance Service
- Dealer Service Manager
- Factory Representative
- Sales Technician



## AUTOMOTIVE MECHANICS

Course Title			Hours Per Week		Quarter Hours Credit
			Class	Lab.	
FIRST QUARTER					
PME	1102	Engine Electrical and Fuel Systems	5	12	9
AUT	1121	Braking Systems	3	3	4
MAT	1101	Fundamentals of Mathematics	5	0	5
Totals			13	15	18
SECOND QUARTER					
PME	1101	Internal Combustion Engines	3	12	7
DFT	1101	Schematics and Diagrams: Power Mechanics	0	3	1
ENG	1101	Reading Improvement	2	0	2
WLD	1101	Basic Gas Welding	0	3	1
PSY	1101	Human Relations	3	0	3
Totals			8	18	14

### *THIRD QUARTER*

AUT	1123	Automotive Chassis and Suspension Systems	3	9	6
AHR	1101	Automotive Air Conditioning	2	3	3
ENG	1102	Communication Skills	3	0	3
PHY	1101	Applied Science	3	2	4
BUS	1103	Small Business Operations	3	0	3
<i>Totals</i>			14	14	19

### *FOURTH QUARTER*

AUT	1124	Automotive Power Train Systems	3	9	6
AUT	1125	Automotive Servicing	3	9	6
PHY	1102	Applied Science	3	2	4
<i>Totals</i>			9	20	16
<i>Total Quarter Hours Credit</i>			67		

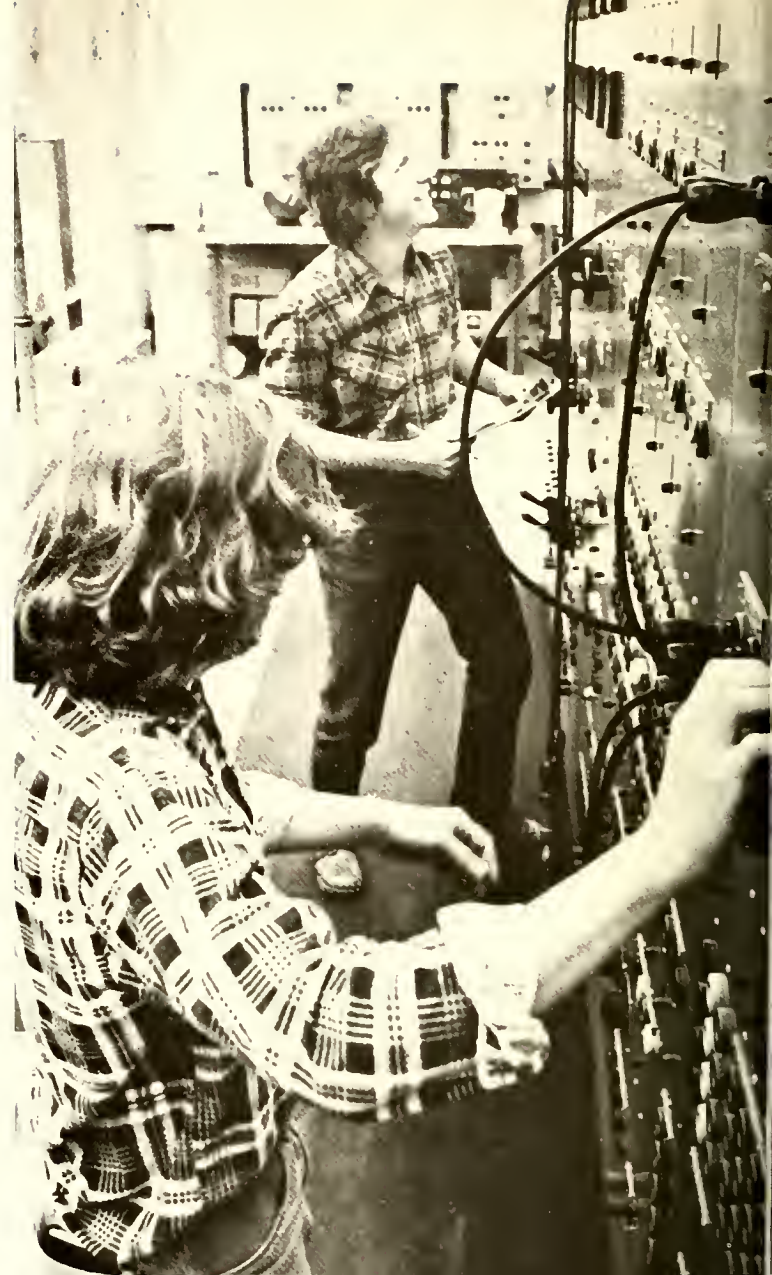
## ELECTRICAL MAINTENANCE

### Diploma Program

This one-year electrical program prepares graduates for entry employment in either the construction or maintenance phase of the electrical industry. Major emphasis is on D.C. theory, A.C. theory, and industrial control systems. Special attention is given to industrial electronics as the electrical maintenance specialist will have overlapping duties in the field of electronics. Related technical instruction designed to support the laboratory shop activities is included.

Students completing this program will find employment in:

- Manufacturing
- Maintenance
- Construction
- Sales
- Utilities
- Service



## ELECTRICAL MAINTENANCE

Course Title				Hours Per Week		Quarter Hours Credit
				Class	Lab.	
FIRST QUARTER						
ELC	1124	Residential Wiring		5	9	8
DFT	1110	Blueprint Reading: Building Trades		0	3	1
MAT	1115	Electrical Math		5	0	5
PHY	1101	Applied Science		3	2	4
Totals				13	14	18

### *SECOND QUARTER*

ELC 1112 Direct & Alternating Current	5	12	9
DFT 1113 Blueprint Reading: Electrical	0	3	1
ENG 1101 Reading Improvement	2	0	2
PHY 1102 Applied Science	3	2	4
PSY 1101 Human Relations	3	0	3
<i>Totals</i>	13	17	19

### *THIRD QUARTER*

ELC 1113 Alternating Current and Direct Current Machines	5	12	9
ELN 1118 Industrial Electronics	3	6	5
ENG 1102 Communication Skills	3	0	3
<i>Totals</i>	11	18	17

### *FOURTH QUARTER*

ELC 1125 Commercial and Industrial Wiring	3	8	6
ELN 1119 Industrial Electronics	3	6	5
ELC 1114 Electrical Controls	2	4	3
DFT 1180 Drafting Trades I	2	2	3
<i>Totals</i>	10	20	17

Total Quarter Hours Credit 71

## MACHINE SHOP

### Diploma Program

The Machinist Program prepares students for entry employment in the metal trades industry. Required courses include machine shop theory and practice, blueprint reading, mathematics, heat treating, English, and basic gas welding.

Major operations included in the shop are bench work; measuring and layout tools; hardening of metals; and operation of drills, lathes, grinders, milling machines, shapers, and related specialty grinding and cutting tools. As an important phase of this Machinist Program, time will be devoted to the fundamentals of numerical control, using a tape controlled milling drilling machine, with the student gaining experience on operation, programming, tape reading, and tape preparation.

Employment opportunities include:

- Manufacturing Firms

- Contractors

- Government Agencies

- Utilities

- Machinery Maintenance and Repair



## MACHINE SHOP

Course Title			Hours Per Week		Quarter Hours Credit
			Class	Lab.	
<i>FIRST QUARTER</i>					
MEC	1101	Machine Shop Theory & Practice	2	12	6
MAT	1101	Fundamentals of Mathematics	5	0	5
DFT	1104	Blueprint Reading: Mechanical	0	3	1
WLD	1101	Basic Gas Welding	0	3	1
MEC	1115	Treatment of Ferrous Metals	2	3	3
<i>Totals</i>			9	21	16
<i>SECOND QUARTER</i>					
MEC	1102	Machine Shop Theory & Practice	2	12	6
MAT	1103	Shop Math I	3	0	3
DFT	1105	Blueprint Reading: Mechanical	0	3	1
ENG	1101	Reading Improvement	2	0	2
MEC	1116	Treatment of Non-Ferrous Metals	2	3	3
PSY	1101	Human Relations	3	0	3
<i>Totals</i>			12	18	18

### *THIRD QUARTER*

MEC	1103	Machine Shop Theory & Practice	4	12	8
DFT	1106	Blueprint Reading: Mechanical	0	3	1
MAT	1104	Shop Math II	3	0	3
ENG	1102	Communication Skills	3	0	3
PHY	1101	Applied Science	3	2	4
<i>Totals</i>			13	17	19

### *FOURTH QUARTER*

MEC	1104	Machine Shop Theory & Practice	4	12	8
MAT	1123	Shop Math III	3	0	3
DFT	1180	Drafting Trades I	2	2	3
PHY	1102	Applied Science	3	2	4
<i>Totals</i>			12	16	18

Total Quarter Hours Credit 71

## NURSING (LPN)

### Diploma Program

The Practical Nursing Program prepares men and women for employment as bedside nurses in hospitals and other institutions. As a member of the health team, the practical nurse works under the direction of licensed physicians or under the supervision of an RN in giving nursing care to patients in uncomplicated situations or assists the registered nurse in more complex nursing situations.

Preclinical units of instruction include nursing skills, normal health and development, conditions of illness, and personal and vocational relationships.

Supervised clinical practice consists of selected learning experiences in accordance with the accepted roles of the licensed practical nurse. Clinical experience includes medical-surgical, geriatrics, care of mothers and infants, and care of children. The clinical experience is of primary importance to the student nurse in establishing rapport among patients and hospital co-workers and developing maturity in working with people.

Practical Nursing students are selected on the basis of demonstrated aptitude for nursing, as determined by pre-entrance tests, interviews with faculty members, high school record, character references, and reports of medical and dental examinations.

Graduates of accredited programs of practical nurse education are eligible to take the licensing examinations given by the North Carolina Board of Nursing. This examination is given twice each year, usually in April and October. A passing score entitles the individual to receive a license and to use a legal title "Licensed Practical Nurse." The license must be renewed every two years. The Licensed Practical Nurse can apply for licensure in most other states on the basis of a satisfactory examination score, without repeating the examination.



## NURSING (LPN)

Course Title			Hours Per Week		Quarter Hours
			Class	Lab. Clinical	Credit
<i>FIRST QUARTER</i>					
NUR	1101	Fundamentals of Nursing	6	6	11
NUR	1102	Anatomy	5	0	5
NUR	1103	Nutrition	3	0	3
NUR	1109	Pharmacology	3	0	3
<i>Totals</i>			17	6	22
<i>SECOND QUARTER</i>					
NUR	1106	Maternal Health Nursing	5	0	9
NUR	1107	Child Health Nursing	5	0	9
NUR	1108	Growth & Development	3	0	3
PSY	1101N	Human Relations	3	0	3
<i>Totals</i>			16	0	22

### *THIRD QUARTER*

NUR	1110	Medical - Surgical Nursing I	9	0	18	15
ENG	1102N	Communications	3	0	0	3
<i>Totals</i>			12	0	18	18

### *FOURTH QUARTER*

NUR	1112	Medical - Surgical Nursing II	9	0	18	15
NUR	1114	Vocational Adjustments	2	0	0	2
<i>Totals</i>			11	0	18	17

Total Quarter Hours Credit 79

## WELDING

### Diploma Program

The welding program combines shop - laboratory experiences with related technical instruction to prepare students for entry employment in welding occupations.

In shop - lab practices, the student progresses from general oxy-acetylene and arc welding to metallic inert gas (MIG) and tungsten inert gas (TIG) processes. Mechanical testing, industrial practices, and certification are included. Students who successfully complete this program and meet all requirements for certification are certified for structural steel in North Carolina. The Institute is working toward a certification program for pipe welders. Employment is available in the following occupational fields:

- Shipbuilding
- Automotive
- Aircraft
- Guided Missiles
- Railroads
- Construction
- Pipe Fitting
- Production Shop
- Job Shop



## WELDING

Course Title			Hours Per Week		Quarter Hours Credit
			Class	Lab.	
FIRST QUARTER					
WLD	1120	Oxyacetylene Welding and Cutting	3	12	7
MAT	1101	Fundamentals of Mathematics	5	0	5
DFT	1104	Blueprint Reading: Mechanical	0	3	1
MEC	1112	Machine Shop Processes	1	3	2
Totals			9	18	15

<i>SECOND QUARTER</i>			
WLD 1121 Arc Welding	3	12	7
DFT 1117 Blueprint Reading: Welding	0	3	1
MAT 1103 Shop Math I	3	0	3
ENG 1101 Reading Improvement	2	0	2
WLD 1112 Mechanical Testing & Inspection	1	3	2
PSY 1101 Human Relations	3	0	3
<i>Totals</i>	12	18	18

### THIRD QUARTER

WLD 1124 Pipe Welding	3	12	7
WLD 1123 Inert Gas Welding	1	3	2
DFT 1118 Pattern Development & Sketching	0	3	1
PHY 1101 Applied Science	3	2	4
ENG 1102 Communication Skills	3	0	3
<i>Totals</i>	10	20	17

### FOURTH QUARTER

WLD 1122 Commercial & Industrial Practices	3	9	6
WLD 1125 Certification Practices	3	6	5
PHY 1102 Applied Science	3	2	4
DFT 1180 Drafting Trades I	2	2	3
<i>Totals</i>	11	19	18

Total Quarter Hours Credit 68

## EVENING CURRICULUM PROGRAMS

Students may earn a certificate or a degree in the following areas of study by attending evening classes. Evening classes are conducted at the Institute between the hours of 6:00 p.m. and 10:00 p.m. Monday through Thursday. Individuals interested in any of the following programs should file the necessary application for curriculum programs with the Office of Student Services.

Automotive Mechanics (certificate)

Business Administration

Electrical Maintenance (certificate)

Floral Design (certificate)

General Office Technology

Industrial Machinist (certificate)

Industrial Mechanics (certificate)

Industrial Welding (certificate)

As a result of the unique nature of this program, these courses will be offered as need and demand require. Beginning courses will be offered each year. Advanced courses will be offered as need for them arises. Students should plan to register for these advanced classes as they are offered so as to complete the program at the proper time.



AUTOMOTIVE MECHANICS

Vocational Certificate Program

This Curriculum was developed for those desiring the basic skills required of an auto mechanic, but due to their working schedule can only attend evening classes. To complete the requirements for a certificate, students will attend Evening Classes for six quarters.

The Curriculum provides training for the development of skills in the use of automotive tools and equipment to disassemble and to reassemble auto systems and system components. The graduate of this curriculum is not required to possess the depth of knowledge and understanding of automotive principles to be able to test and diagnose; but through experience he may acquire these abilities. The course number suffixes used are to distinguish the courses from those of the diploma program.

Course Title	Hours Per Week		Quarter Hours
	Class	Lab.	Credit
<i>FIRST QUARTER</i>			
PME 1101A Automotive Engines	2	4	4
MAT 1101 Fundamentals of Mathematics	5	0	5
<i>Totals</i>	7	4	9
<i>SECOND QUARTER</i>			
PME 1102A Automotive Fuel Systems	2	4	4
ENG 1102 Communications Skills	2	0	2
<i>Totals</i>	4	4	6

THIRD QUARTER						
PME	1102B	Automotive Electrical Systems	2	4	4	
WLD	1100	Basic Gas Welding	2	4	4	
Totals			4	8	8	
FOURTH QUARTER						
AUT	1123A	Chassis and Suspension	2	4	4	
AUT	1121A	Auto Braking Systems	1	2	2	
Totals			3	6	6	
FIFTH QUARTER						
AUT	1124A	Automotive Power Train	2	4	4	
AHR	1101A	Auto Air Conditioning	1	2	2	
Totals			3	6	6	
SIXTH QUARTER						
AUT	1125A	Automotive Trouble Shooting	Totals	0	5	2
Total Quarter Hours Credit				37		



## BUSINESS ADMINISTRATION

### Associate in Applied Science Degree

The Business Administration program has as its specific objectives to develop an understanding of the principles of organization and management in business operations, to obtain knowledge in accounting, finance, and business law.

Successful completion of the following courses will allow the business graduate to enter the working world with professional competence for the many phases of administrative work that might be encountered in the average business.

Individuals participating in this program are required to enroll for a minimum of 6 credit hours per quarter.

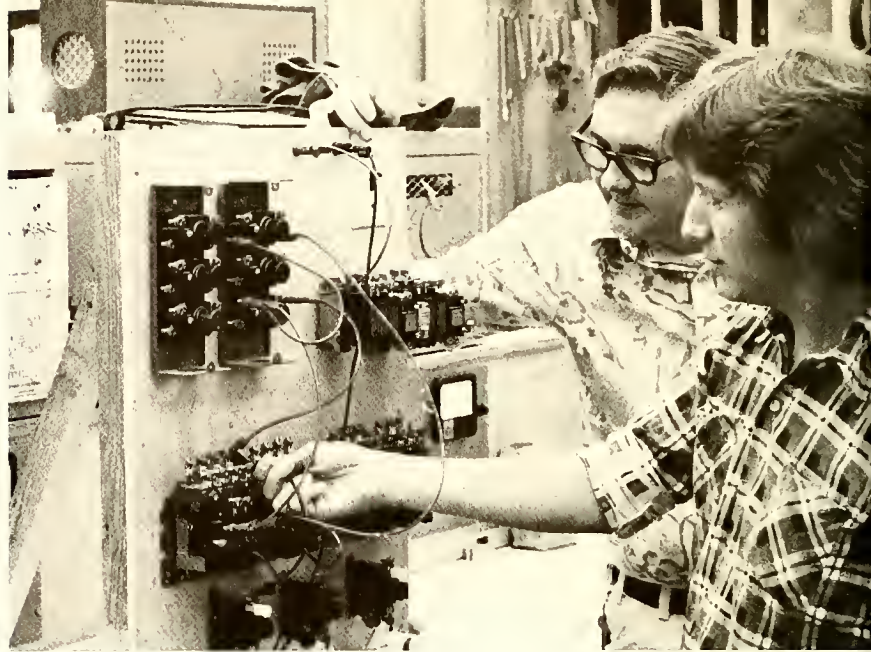
# BUSINESS ADMINISTRATION

Course Title			Quarter Hours Credit	
	Class	Lab.		
ENG 101 Technical Communications I	3	0	3	
*ENG 102 Technical Communications II	3	0	3	
*ENG 103 Report Writing	3	0	3	
*ENG 204 Oral Communications	3	0	3	
*ENG 206 Business Communications	3	0	3	
MAT 110 Business Mathematics	5	0	5	
BUS 101 Introduction to Business	5	0	5	
BUS 102 Typewriting	2	3	3	
BUS 110 Office Machines	2	2	3	
BUS 115 Business Law I	3	0	3	
*BUS 116 Business Law II	3	0	3	
BUS 120 Accounting I	5	2	6	
*BUS 121 Accounting II	5	2	6	
*BUS 122 Accounting III	5	2	6	
*BUS 123 Business Finance	3	0	3	
*BUS 229 Taxes	3	2	4	
BUS 230 Taxes II	3	2	4	
BUS 232 Sales Development	3	0	3	
BUS 235 Business Management	3	2	4	
BUS 239 Marketing	5	0	5	
BUS 271 Office Management	3	2	4	
BUS 272 Principles of Supervision	3	0	3	
EDP 104 Introduction to Data Processing	3	2	4	
ECO 102 Economics I	3	0	3	
*ECO 104 Economics II	3	0	3	
ELECTIVES:				
BUS 112 Records Management	3	0	3	
*BUS 219 Credit Procedures and Problems	3	0	3	
*BUS 226 Payroll Records and Accounting	3	0	3	
BUS 245 Retailing	3	0	3	
BUS 247 Business Insurance	3	0	3	
BUS 281 Human Relations	3	0	3	
* Indicates this course has a prerequisite.				

A total of 110 Quarter Hours Credit is required for the Associate in Applied Science Degree in Business Administration. As a result of the unique nature of this program, these courses will be offered as need and demand requires. Beginning courses will be offered each year. Advanced courses will be offered at least once every three years. Students should plan to register for these advanced classes as they are offered so as to complete the program within eleven quarters.

Sequence courses such as ENG 101, ENG 102, and ENG 103 should be taken in order.

This sheet can be used as a guide for you to follow in selecting your courses. Check off the courses as they are completed.



## ELECTRICAL MAINTENANCE

### Vocational Certificate Program

This Curriculum is designed to provide students with a background in electrical theory with practical application for industry. Courses of study in direct and alternating current, industrial controls, power systems, electronic devices, and digital electronics will be provided. Students also receive training in drafting and air conditioning. Related courses in mathematics and communication skills are an important part of the total program.

As a result of the unique nature of this program, these courses will be offered as need and demand require. Beginning courses will be offered each year. Advanced courses will be offered as need for them arises. Students should plan to register for these advanced classes as they are offered so as to complete the program at the proper time.

## ELECTRICAL MAINTENANCE

Course Title		Class	Lab.	Quarter Hours Credit
<i>FIRST QUARTER</i>				
MAT	1115 Electrical Math	5	0	5
ELC	1112A Direct Current	2	4	4
	<i>Totals</i>	7	4	9
<i>SECOND QUARTER</i>				
DFT	1180A Drafting Trades	1	2	2
ELC	1112B Direct Current	2	4	4
	<i>Totals</i>	3	6	6
<i>THIRD QUARTER</i>				
ENG	1102 Communication Skills	2	0	2
ELC	1113A Alternating Current	2	4	4
	<i>Totals</i>	4	4	6
<i>FOURTH QUARTER</i>				
AHR	1121A Principles of Refrigeration and Air Conditioning	1	2	2
ELC	1113B Alternating Current	2	4	4
	<i>Totals</i>	3	6	6

### *FIFTH QUARTER*

ELC	1114 Industrial Control Circuits	2	4	3
ELN	1118A Basic Industrial Electronics	2	4	4
	<i>Totals</i>	4	8	7

### *SIXTH QUARTER*

ELN	1119 Digital Industrial Electronics	3	6	5
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Total Quarter Hours Credit 39

### ELECTIVES:

ELC	1109 Industrial Power Systems	2	4	4
ELC	1135 Pneumatic and Electrical Controls			



## FLORAL DESIGN

### Technical Certificate Program

This curriculum was developed for individuals desiring to enter the Floral Industry as designers and with a working knowledge of greenhouse operations. To complete the requirements for a certificate, students will attend classes three evenings a week for six quarters.

Graduates of this curriculum can enter the Floral Industry with competence as designers and with knowledge of greenhouse operations.

## FLORAL DESIGN

Course Title		Hours Per Week		Quarter Hours Credit
		Class	Lab.	
FIRST QUARTER				
FLO	101A Floral Design I	1	6	3
HOR	254A Plant Propagation	1	2	2
Totals		2	8	5
SECOND QUARTER				
FLO	102A Floral Design II	1	6	3
HOR	254B Plant Propagation	1	2	2
Totals		2	8	5
THIRD QUARTER				
FLO	103A Floral Design III	1	6	3
BUS	281 Human Relations in Business	3	0	3
*HOR	150A Plant Identification and Nomenclature	1	2	2
Totals		5	8	8

### *FOURTH QUARTER*

FLO 201A Floral Design IV	1	6	3
HOR 264A Greenhouse Management	1	2	2
<i>Totals</i>	2	8	5

### *FIFTH QUARTER*

FLO 202A Floral Design V	1	6	3
HOR 264B Greenhouse Management	1	2	2
<i>Totals</i>	2	8	5

### *SIXTH QUARTER*

FLO 203A Floral Design VI	1	6	3
BUS 195 Small Business Operations	3	0	3
*HOR 251A Residential Landscaping	1	2	2
<i>Totals</i>	5	8	8

Total Quarter Hours Credit 36

\*ELECTIVES



## GENERAL OFFICE TECHNOLOGY

### Associate in Applied Science Degree

The General Office Curriculum is designed to develop the necessary variety of skills for employment in the business world. Successful completion of the following courses will provide the General Office graduate with the necessary skills and general knowledge essential to success in the business world.

Individuals participating in this program are required to enroll for a minimum of 6 credit hours per quarter.

## GENERAL OFFICE TECHNOLOGY

Course Title			Quarter Hours	
	Class	Lab.	Credit	
<i>SECOND QUARTER</i>				
ENG 101	Technical Communications I	3	0	3
*ENG 102	Technical Communications II	3	0	3
*ENG 204	Oral Communications	3	0	3
*ENG 206	Business Communications	3	0	3
MAT 110	Business Mathematics	5	0	5
BUS 101	Introduction to Business	5	0	5
BUS 102	Typewriting I	2	3	3
*BUS 103	Typewriting II	2	3	3
*BUS 104	Typewriting III	2	3	3
BUS 110	Office Machines	2	2	3
BUS 112	Records Control	3	0	3
BUS 115	Business Law I	3	0	3
*BUS 116	Business Law II	3	0	3
BUS 120	Accounting I	5	2	6
*BUS 121	Accounting II	5	2	6
BUS 183	Terminology and Vocabulary	3	0	3
*BUS 205	Advanced Typewriting	2	3	3
*BUS 210	Executive Office Typing	2	3	3
*BUS 211	Advanced Office Machines	2	2	3
*BUS 212	Machine Transcription I	2	2	3
*BUS 213	Machine Transcription II	2	2	3
*BUS 214A	Secretarial Procedures I	3	2	4
*BUS 214B	Secretarial Procedures II	3	2	4

*BUS 226	Payroll Records and Accounting	3	0	3
*BUS 229	Taxes	3	2	4
BUS 232	Sales Development	3	0	3
BUS 272	Principles of Supervision	3	0	3
EDP 104	Introduction to Data Processing	3	2	4
PSY 112	Personality Development	3	0	3
ELECTIVES:				
*BUS 219	Credit Procedures and Problems	3	0	3
BUS 245	Retailing	3	0	3
BUS 247	Business Insurance	3	0	3
BUS 281	Human Relations	3	0	3

\* Indicates this course has a prerequisite

A total of 112 quarter hours credit is required for the Associate in Applied Science Degree in General Office Technology. As a result of the unique nature of this program these courses will be offered as need and demand require. Beginning courses will be offered each year. Advanced courses will be offered at least once every three years. Students should plan to register for these advanced classes as they are offered so as to complete the program within twelve quarters.

Sequence courses such as ENG 101 and ENG 102 should be taken in order.

This sheet can be used as a guide for you to follow in selecting your courses. Check off the courses as they are completed.



## INDUSTRIAL MACHINIST

### Vocational Certificate Program

This Curriculum is designed to provide students with indepth skills in machine shop operation. Required courses include mathematics, blueprint reading, welding, heat treating, and machine shop theory and practice.

To complete the requirements for the certificate, students will attend Evening Classes for six quarters.

As a result of the unique nature of this program, these courses will be offered as need and demand require. Beginning courses will be offered each year. Advanced courses will be offered as need for them arises. Students should plan to register for these advanced classes as they are offered so as to complete the program at the proper time.

## INDUSTRIAL MACHINIST

Course Title	Hours Per Week		Quarter
	Class	Lab.	Hours Credit
<i>FIRST QUARTER</i>			
MAT 1101 Fundamentals of Mathematics	5	0	5
WLD 1100 Basic Gas Welding	2	4	4
<i>Totals</i>	7	4	9
<i>SECOND QUARTER</i>			
DFT 1180A Drafting Trades	1	2	2
WLD 1102 Basic Arc Welding	2	4	4
<i>Totals</i>	3	6	6
<i>THIRD QUARTER</i>			
DFT 1104 Blueprint Reading: Mechanical	0	3	1
MEC 1101A Machine Shop	2	4	4
<i>Totals</i>	2	7	5

### *FOURTH QUARTER*

ENG 1102 Communication Skills	2	0	2
MEC 1101B Machine Shop	2	4	4
<i>Totals</i>	4	4	6

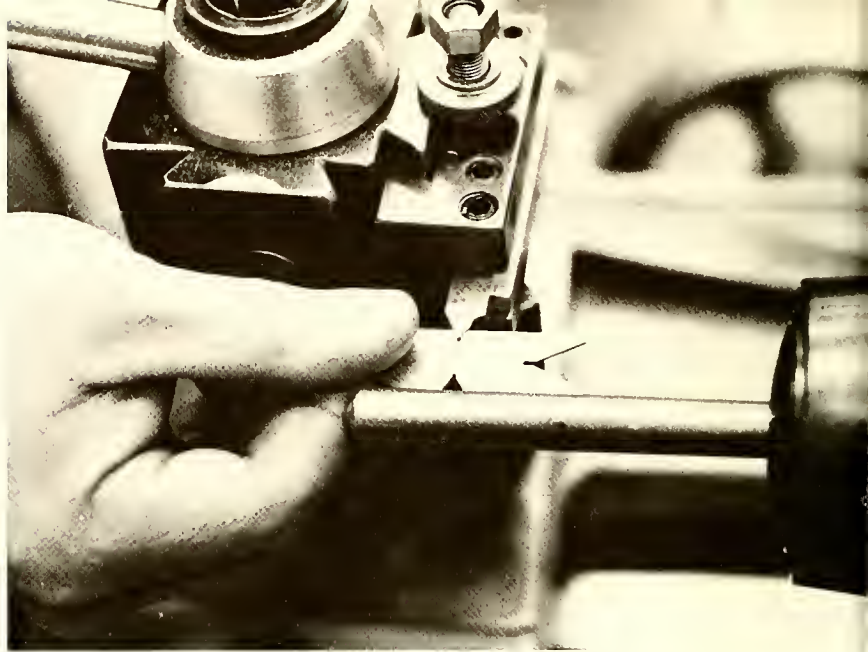
### *FIFTH QUARTER*

DFT 1105 Blueprint Reading: Mechanical	0	3	1
MAT 1103 Shop Math	3	0	3
MEC 1102A Machine Shop	2	4	4
<i>Totals</i>	5	7	8

### *SIXTH QUARTER*

MEC 1102B Machine Shop	2	4	4
MEC 1115 Treatment of Ferrous Metals	2	3	3
<i>Totals</i>	4	7	7

Total Quarter Hours Credit 41



## INDUSTRIAL MECHANICS

### Vocational Certificate Program

This curriculum is designed to provide students with a broad background in industrial skills required of the person who goes into industry as a mechanic. Skills are developed in machine operations, gas and arc welding, direct and alternating currents, machine and controls. Students also receive training in basic drawing and blueprint reading. Related courses in communication skills and mathematics are also an integral part of the program.

To complete the requirements for the certificate, students will attend class three evenings a week for six quarters.

# INDUSTRIAL MECHANICS

Course Title			Hours Per Week	Quarter Hours	
			Class	Lab.	Credit
<i>FIRST QUARTER</i>					
MAT	1101	Fundamentals of Mathematics	5	0	5
WLD	1100	Basic Gas Welding	2	4	4
<i>Totals</i>			7	4	9
<i>SECOND QUARTER</i>					
DFT	1180A	Drafting Trades	1	2	2
WLD	1102	Basic Arc Welding	2	4	4
<i>Totals</i>			3	6	6
<i>THIRD QUARTER</i>					
DFT	1104	Blueprint Reading: Mechanical	0	3	1
MEC	1101A	Machine Shop Theory and Practice	2	4	4
<i>Totals</i>			2	7	5

## FOURTH QUARTER

ENG	1102	Communications Skills	2	0	2
MEC	1101B	Machine Shop Theory and Practice	2	4	4
<i>Totals</i>			4	4	6

## FIFTH QUARTER

ELC	1105A	Industrial Electrical Practices	2	4	4
AHR	1121A	Principles of Refrigeration and Air Conditioning	1	2	2
<i>Totals</i>			3	6	6

## SIXTH QUARTER

ELC	1105B	Industrial Electrical Practices	2	4	4
AHR	1121B	Principles of Refrigeration and Air Conditioning	1	2	2
<i>Totals</i>			3	6	6

Total Quarter Hours Credit 38

## ELECTIVES:

ELC	1135	Pneumatic and Electrical Controls
MEC	1155	Mechanical Systems



## INDUSTRIAL WELDING

### Vocational Certificate Program

This Curriculum is designed to provide students with indepth skills in Welding practices. Required courses include basic gas welding, basic arc welding, arc welding, pipe welding, and machine shop theory and practice. Related courses in mathematics, drafting and blueprint reading, and communication skills are an important part of the program.

To complete the requirements for the certificate, students will attend Evening Classes for six quarters.

As a result of the unique nature of this program, these courses will be offered as need and demand require. Beginning courses will be offered each year. Advanced courses will be offered as need for them arises. Students should plan to register for these advanced classes as they are offered so as to complete the program at the proper time.

# INDUSTRIAL WELDING

Course Title			Hours Per Week		Quarter Hours Credit
			Class	Lab.	
<i>FIRST QUARTER</i>					
MAT	1101	Fundamentals of Mathematics	5	0	5
WLD	1100	Basic Gas Welding	2	4	4
<i>Totals</i>			7	4	9
<i>SECOND QUARTER</i>					
DFT	1180A	Drafting Trades	1	2	2
WLD	1102	Basic Arc Welding	2	4	4
<i>Totals</i>			3	6	6
<i>THIRD QUARTER</i>					
DFT	1104	Blueprint Reading: Mechanical	0	3	1
WLD	1121A	Arc Welding	2	4	4
<i>Totals</i>			2	7	5

<i>FOURTH QUARTER</i>					
ENG	1102	Communication Skills	2	0	2
WLD	1121B	Arc Welding	2	4	4
<i>Totals</i>			4	4	6
<i>FIFTH QUARTER</i>					
MEC	1101A	Machine Shop	2	4	4
WLD	1124A	Pipe Welding	1	5	3
<i>Totals</i>			3	9	7
<i>SIXTH QUARTER</i>					
MEC	1101B	Machine Shop	2	4	4
WLD	1124B	Pipe Welding	1	5	3
<i>Totals</i>			3	9	7
<i>Total Quarter</i>			<i>Hours Credit</i>		
			40		

STUDENT  
JR MOST  
IMPORTANT  
PRODUCT



# COURSE DESCRIPTIONS

Course content for Two-Year Day and Evening Degree courses is outlined in the course descriptions to follow. Two-Year Degree courses are numbered 100 through 300.

All courses are to be pursued in a normal sequence with prerequisite courses taken as indicated.

Provided for each course is the following information: course number, title, number of class, laboratory, and credit hours.

## ART AND DESIGN

Course Title	Quarter Hours		
	Class	Lab.	Credit
<b>ART 101 HISTORY OF ART I</b>	<b>3</b>	<b>0</b>	<b>3</b>
An introduction to the basic concepts and philosophies that govern the development of art. A study of both two and three dimensional art forms from Prehistoric through the Renaissance.			
Prerequisite: None			
<b>ART 111 HISTORY OF ART II</b>	<b>3</b>	<b>0</b>	<b>3</b>
A continuation of Art History I. The study of the art forms from the Renaissance through 1880.			
Prerequisite: ART 101.			
<b>ART 121 HISTORY OF ART III</b>	<b>3</b>	<b>0</b>	<b>3</b>
Major emphasis is given to the changes in concepts of contemporary art forms beginning with Impressionism. Both oriental and occidental art will be studied. The course will emphasize the influence and changes these art forms have had on exterior and interior architecture, furniture design, and the decorative arts.			
Prerequisite: ART III			
<b>CAT 101 ADVERTISING PRINCIPLES</b>	<b>3</b>	<b>0</b>	<b>3</b>
The aim of this course is to acquaint the student with more of the total scope and involvements of the advertising field — its social and economic significance; its basic purposes and methods of achieving its objectives; its structure and organization; and its means of making known, promoting, and distributing its products and services. Involved also is the survey of general advertising forms and media to acquaint the student with their basic characteristics, functions, and requirements.			
Prerequisite: None.			

<b>CAT 116 PHOTOGRAPHY I</b>	<b>2</b>	<b>6</b>	<b>4</b>
An introduction to the photographic process. Experience includes basic camera and light meter controls, film and print processing and quality control factors. The student is acquainted with films, papers, chemicals, and print finishing procedures.			
Prerequisite: DES 122.			
<b>CAT 125 COMMERCIAL ART I</b>	<b>2</b>	<b>6</b>	<b>4</b>
An introduction to the field of advertising design and the role and responsibilities of the designer in the profession. Students are introduced to the nature and use of the layout through lecture and studio practice. Emphasis is placed on the procedures of developing the layout, application of design principles to advertising and graphic design, and the use of tools and materials. At this point students are introduced to basic professional terminology.			
Prerequisite: DES 112, CGT 110.			
<b>CAT 207 COMMERCIAL ART II</b>	<b>2</b>	<b>9</b>	<b>5</b>
A continuation of the application of principles and procedures introduced in CAT 125. Work becomes more comprehensive in specifications regarding project requirements. Emphasis is placed on idea development and its execution, effective visual communication, and continued development of mechanical skills. Continued emphasis will also be placed on expanding the student's professional vocabulary. Studio work is augmented with field trips to professional firms.			
Prerequisite: CAT 125.			
<b>CAT 209 COMMERCIAL ART III</b>	<b>3</b>	<b>6</b>	<b>5</b>
Continued emphasis is placed on effective visual communication and continued practice in the development of mechanical skills required for the execution of work. Students are introduced to and practice copy-fitting procedures. At this time, students are acquainted with types of printing papers and their effect on the finished product. Field trips continue to augment studio classes. When feasible, design projects are correlated with Graphic Arts 216.			
Prerequisite: CAT 207.			
<b>CAT 211 COMMERCIAL ART IV</b>	<b>3</b>	<b>6</b>	<b>5</b>
Continued emphasis is placed on effective visual communication on a more sophisticated level. Design projects encompass a variety of advertising forms and their individual requirements. When feasible, Photography 217 projects are correlated with design projects. Continued practice is provided in copy-fitting.			
Prerequisite: CAT 209.			
<b>CAT 217 PHOTOGRAPHY II</b>	<b>2</b>	<b>6</b>	<b>4</b>
A continuation of the practice of principles and procedures introduced in CAT 116. Emphasis is placed on quality control of the negative and			

the finished print. Assigned projects are geared toward visual communication as it relates to advertising.

Prerequisite: CAT 116

**CGT 110 LETTERING & TYPE** 2 6 4

An introduction to the mechanics of hand lettering and typography and their application to layout and graphic design. Hand lettering is practiced as it relates to layout design. Fundamentals of typographic measurement, methods of type composition, and terminology are introduced. Emphasis is also placed on using type as a design motif.

Prerequisite: None.

**CGT 214 GRAPHICS ARTS I** 2 9 5

An introduction to preparing art for printing. The student is acquainted with the nature, function, and elements of mechanical art, tools and materials required for its execution, and related terminology. The student is introduced to various types of equipment used in off-set printing, its operation and quality control factors. Experience includes fundamentals of small off-set press operations, copy camera operations, platemaking, photo-lettering, and fundamentals of silk-screen printing. Studio work is augmented with field trips to printing firms.

Prerequisite: None.

**CGT 216 GRAPHIC ARTS II** 3 6 5

Practice in preparing art for printing is continued with greater emphasis on mechanical proficiency and accuracy of work. Students are introduced to the procedures for preparing such printed effects as reversed, screen tints, dropouts, surprints, etc. Design projects are correlated with this course to provide the student with experience in preparing his design work for printing and printing it. Studio work is further augmented with field trips.

Prerequisite: CGT 214.

**CGT 218 ILLUSTRATION** 2 6 4

A course designed to provide practice with media and techniques for illustration. Experience includes the use and control of media such as ink, shading films, felt markers for product drawings and spot illustrations. The emphasis of the course is on media control and design factors related to the purpose of the illustration.

Prerequisite: DES 220 and DES 122.

**CGT 220 ILLUSTRATION** 2 9 5

A course designed to provide concentration on the illustrative aspect of graphic design. Projects are correlated with CGT 223 to reinforce the fact that pictorial matter must be conceived as part of the total concept of a design unit. Consideration must be given to media selection, presentation and selection of subject matter, style, and techniques in relation to the function of the design and the audience

to which it is geared.

Prerequisite: CGT 218.

**CGT 222 GRAPHIC ARTS III** 3 6 5

Experience will include the introduction and practice of preparing art for multi-color printing and the principles and techniques of mechanical color separation. Students will undertake the execution of more complex mechanical art and continue to print various projects executed in CAT 211. Whenever feasible projects are correlated with CAT 211.

Prerequisite: CGT 216.

**CGT 223 SPECIAL DESIGN PROJECTS** 3 9 6

Advanced problems in advertising design. The course is designed to provide additional studio time at the end of the student's training period. The aim of the course is to allow for more in-depth investigation into areas of particular interest to an individual and/ or to provide added opportunity for the upgrading of weaknesses apparent at this point.

Prerequisite: CGT 222 and CAT 211.

**DES 102 DESIGN I** 3 6 5

This is the first in a sequence of three courses which will introduce design concepts, principles of design, and elements of design. Practical exercises and problems are undertaken to develop the creative and manipulative skills.

Prerequisite: None.

**DES 108 BASIC DRAWING** 2 4 4

A basic course in free and schematic drawing skills and concepts. Emphasis is placed on developing motor controls and the ability to see and understand form and spatial relationships.

**DES 112 DESIGN II** 3 6 5

This course is the second in a sequence of three. Emphasis will be given to creative as well as practical problem solving. Media control and craftsmanship will be stressed.

Prerequisite: DES 102.

**DES 120 LIFE DRAWING I** 0 6 2

Life Drawing is a study of figure drawing, using the live model as well as various texts, and includes a basic study of anatomy. The student learns to draw using such media as pencil, charcoal, pastel, pen, and ink, etc. Human proportion, scale, and structure are stressed as they relate to design. Students are encouraged to develop an expressive style of drawing which might transfer to other course work.

Prerequisite: None.

**DES 121 MARKET MATERIALS** 2 2 3

A study in detail with emphasis placed on interior fittings such as furniture, drapery fabric, wall coverings, and floor finishes. New additions to the lines of home furnishing merchandise are brought before the students, discussed, and analyzed from the standpoint of materials, construction and design. Frequent field trips will be made to manufacturers of these products and suppliers' showrooms of floor finishes and wall coverings, as well as manufacturers' representatives frequently lecture to the students and present their product.

Prerequisite: None.

**DES 122 DESIGN III** 3 6 5

The third course in the design sequence will expand the foundation of basic skills to an advanced level. Problem solving and presentation techniques will be major directions of emphasis.

Prerequisite: DES 112.

**DES 125 COLOR THEORY AND APPLICATION** 2 4 4

A study of basic color theory and color uses in interior design in all historic periods from Egyptian to contemporary and for all purposes: residential, commercial, and industrial.

Prerequisite: None.

**DES 203 INTRODUCTION TO INTERIOR DESIGN** 2 9 5

This course will provide the opportunity to apply the principle of abstract design, to plane surfaces and varied volumes that constitute the basic elements of interior environments.

Prerequisites: ART 121, DES 122, and DES 125.

**DES 205 PERIOD STYLES IN FURNITURE  
DECORATING TO RENAISSANCE** 5 0 5

Detailed brochures and texts will be studied so that the student can easily recognize and locate chronologically period room designs. A course of definition in decorating techniques stressing the historically accurate designs of a given period from earliest times to present day.

Prerequisite: None.

**DES 206 FURNITURE DESIGN AND CONSTRUCTION** 2 4 3

A detailed study of furniture design of all periods as well as the materials used. Techniques of case work construction and present day upholstering procedures. This course should familiarize the student with the various woods, metals, marbles, and laminates used in furniture design as well as fillings such as spring, webb, and coil construction in residential and commercial seating.

Prerequisite: DES 205.

**DES 207 INTRODUCTION TO FABRICS** 2 2 3

This course is a study of the characteristics and uses of fibers and

materials and how they are woven, formed, or matted, how they are ornamented and finished.

Prerequisite: None.

**DES 212 RESIDENTIAL DESIGN** 2 9 5

This course will introduce to the student a planned, flexible approach to Interior Design problem solving. Interior Design will include the following specific areas: concepts of period styles with stress put on authenticity, concepts of understanding of interior design based on architectural modern styles. Combined with the individual interior design problems, customer approach and visual college presentation will be developed along with total specifications and cost accounting.

Prerequisite: ART 121, DES 122, and DES 125.

**DES 220 LIFE DRAWING II** 0 6 2

A continuation of DES 120 moving toward advanced rendering techniques and anatomy. The student may be asked to submit a major project dealing with figure drawing.

Prerequisite: DES 120.

**DES 222 RESIDENTIAL DESIGN** 2 9 5

This course is a continuation of DES 212. It includes a study of wall and floor coverings in historic and contemporary use, of continued use of period styles and contemporary styling in furniture, and draperies and accessories as used in interior design problems. The student should be prepared to execute a complete interior using standard presentation techniques. Included with presentation would be typed list of specifications listing each item that is used with complete description as to size, color, location within the finished installation. Also included in the specifications would be manufacturer and price.

Prerequisite: DES 212.

**DES 223 SURVEY OF DECORATIVE ARTS** 3 0 3

This survey will cover identification techniques of production, display and care of antique and contemporary art objects. A discussion of quality will be an inherent part of this course.

Prerequisite: None.

**DES 231 COMMERCIAL DESIGN** 2 9 5

This course includes a survey of basic office layouts and design. Source studies and related texts discussing such commercial interiors as banks, restaurants, motels and various office requirements noting equipment required in these different installations.

Prerequisite: DES 212.

**DES 241 SURVEY OF TWENTIETH CENTURY DESIGN** 3 0 3

This course will examine contemporary architecture, furniture, and decorative arts as they and their creator's mirror the changing

philosophies and values of the Twentieth Century.

Prerequisite: None.

**DES 260 SPECIAL PROJECTS** 2 12 6

Advanced problems in Interior Design. The course is designed to provide additional studio time at the end of the student's training period. The aim of the course is to allow for more in-depth investigation into areas of particular interest to an individual and/or to provide added opportunity for the upgrading of weaknesses apparent at this point.

Prerequisites: DES 222, DES 231, and DES 236.

**DES 262 COMMERCIAL DESIGN** 2 12 6

A continuation of DES 231 Commercial Design.

Prerequisite: DES 231.

## BUSINESS

Course Title	Quarter		
	Class	Lab.	Credit

**BUS 101 INTRODUCTION TO BUSINESS** 5 0 5

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management.

Prerequisite: None.

**BUS 102 TYPEWRITING I** 2 3 3

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

Prerequisite: None.

**BUS 103 TYPEWRITING II** 2 3 3

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms.

Prerequisite: BUS 102 or the equivalent.

**BUS 104 TYPEWRITING III** 2 3 3

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are

tabulation, manuscript, correspondence, and business forms.

Prerequisite: BUS 103 or the equivalent.

**BUS 106 SHORTHAND I** 3 2 4

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.

Prerequisite: None.

**BUS 107 SHORTHAND II** 3 2 4

Continued study of theory with greater emphasis on dictation and elementary transcription.

Prerequisite: BUS 106 or the equivalent.

**BUS 108 SHORTHAND III** 3 2 4

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.

Prerequisite: BUS 107.

**BUS 110 OFFICE MACHINES** 2 2 3

A general survey of the business and office machines. Emphasizes techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and calculators.

Prerequisite: None.

**BUS 112 RECORDS MANAGEMENT** 3 2 4

A study of the fundamentals of developing and operating systems for classifying, storing, controlling, and retrieving business records. Theory and practice in the various filing control systems, such as alphabetic, numeric, geographic, and subject filing. Principles of management are applied to planning and controlling the records system.

Prerequisite: None.

**BUS 115 BUSINESS LAW I** 3 0 3

A general course designed to acquaint the student with certain fundamentals and principles of business law, including law and its enforcement, contracts, sales, bailments, and negotiable instruments.

Prerequisite: None.

**BUS 116 BUSINESS LAW II** 3 0 3

A continuation of BUS 115 with emphasis on agency and employment, partnerships, corporations, risk-bearing devices, and property rights.

Prerequisite: BUS 115.

**BUS 120-S ACCOUNTING I (for non-majors)** 5 2 6

Basic principles, procedures, and terminology of accounting applicable to service and mercantile enterprises. Includes payroll, making entries,

preparing financial statements, and analyzing and interpreting financial data.			
Prerequisite: None.			
<b>BUS 121-S ACCOUNTING II (for non-majors)</b>	<b>5</b>	<b>2</b>	<b>6</b>
A continuation of BUS 120-S with more intensive training in accounting principles and procedures. Includes a study of the different forms of ownership with emphasis on partnership accounting.			
Prerequisite: BUS 120-S.			
<b>BUS 120 ACCOUNTING I</b>	<b>5</b>	<b>2</b>	<b>6</b>
Principles, techniques and tools of accounting, for understanding of the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned.			
Prerequisite: None.			
<b>BUS 121 ACCOUNTING II</b>	<b>5</b>	<b>2</b>	<b>6</b>
Further study of accrual accounting, including payroll, receivables, payables, inventories, systems design, and partnerships. Emphasis is placed on the recording, summarizing and interpreting data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.			
Prerequisite: BUS 120.			
<b>BUS 122 ACCOUNTING III</b>	<b>5</b>	<b>2</b>	<b>6</b>
Introduction to corporation accounting, including organization and operation; stockholders' equity, earnings, and dividends; long-term liabilities and investments. Topics include departmental accounting, branch accounting, job order cost system, funds statement and cash flow.			
Prerequisite: BUS 121.			
<b>BUS 123 BUSINESS FINANCE</b>	<b>3</b>	<b>0</b>	<b>3</b>
Financing of business units, as individuals, partnerships, corporations, and trusts. A detailed study is made of short-term, long-term, and consumer financing.			
Prerequisite: ECO 104.			
<b>BUS 205 ADVANCED TYPEWRITING</b>	<b>2</b>	<b>3</b>	<b>3</b>
Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, statistical tabulation, and the typing of reports, manuscripts, and legal documents.			
Prerequisite: BUS 104.			

<b>BUS 206 DICTATION AND TRANSCRIPTION I</b>	<b>3</b>	<b>2</b>	<b>4</b>
Develops the skill of taking dictation and of transcribing at the typewriter materials appropriate to the course of study, which includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Minimum dictation rate of 80 words per minute for three minutes is recommended.			
Prerequisite: BUS 108.			
<b>BUS 207 DICTATION AND TRANSCRIPTION II</b>	<b>3</b>	<b>2</b>	<b>4</b>
Covering materials appropriate to the course of study, the student develops the accuracy, speed, and vocabulary that will enable her to meet the secretarial requirements of business and professional offices. Special emphasis is given to office-style dictation. Minimum dictation rate of 90 words per minute for three minutes on new material is recommended. The student is encouraged to strive for 110 words per minute.			
Prerequisite: BUS 206.			
<b>BUS 208 DICTATION AND TRANSCRIPTION III</b>	<b>3</b>	<b>2</b>	<b>4</b>
Principally a speed building course, covering materials appropriate to the course of study, with emphasis on speed as well as accuracy. Minimum dictation rate of 100 words per minute for three minutes is recommended. The student is encouraged to strive for 120 words per minute.			
Prerequisite: BUS 207.			
<b>BUS 210 EXECUTIVE OFFICE TYPING</b>	<b>2</b>	<b>3</b>	<b>3</b>
Specialization in production typing in one of these areas: legal or general executive. Typing situations approximate the chosen field of study. The student learns to think independently regarding style and method.			
Prerequisite: BUS 104.			
<b>BUS 211 ADVANCED OFFICE MACHINES</b>	<b>2</b>	<b>2</b>	<b>3</b>
Instruction in the operation of bookkeeping-accounting machines, duplicating equipment, electronic calculators, IBM Executive typewriter, and automated typing equipment.			
Prerequisite: BUS 110.			
<b>BUS 212 MACHINE TRANSCRIPTION I</b>	<b>2</b>	<b>2</b>	<b>3</b>
Students develop skill in typing mailable letters, memoranda, and manuscripts directly from recorded belts or tapes. Emphasis is placed on vocabulary development, spelling, grammar, punctuation, and word division.			
Prerequisite: BUS 104 or the equivalent.			
<b>BUS 213 MACHINE TRANSCRIPTION II</b>	<b>2</b>	<b>4</b>	<b>4</b>
Students do more intensive work in transcribing directly from re-			

corded belts or tapes. Additional training is given on automated typing equipment. Speed and accuracy are emphasized.  
Prerequisite: BUS 212.

**BUS 214A SECRETARIAL PROCEDURES  
AND ADMINISTRATION I**

3 2 4

A course designed to provide answers to problems of office procedure, efficiency, and human relations. A study of the overall view of the secretary's responsibilities including receptionist duties, purchasing equipment and supplies, processing mail, telephone and telegraphic services. Students are trained in the development of initiative and independent thinking and office problem-solving through simulated projects.

Prerequisite: Open to second-year students only.

**BUS 214B SECRETARIAL PROCEDURES  
AND ADMINISTRATION II**

3 2 4

A continuation of BUS 214A. The study of secretarial responsibilities including records management; travel, conference and meeting arrangements; collecting, processing, and presenting business data; handling financial and legal aspects of secretarial work; and the supervisory-administrative role of the secretary. Students are trained in the development of initiative and independent thinking and office problem-solving through simulated projects.

Prerequisite: BUS 214A.

**BUS 219 CREDIT PROCEDURES AND PROBLEMS**

3 0 3

Problems and practices in modern credit management. Responsibilities of the credit department and its relation to other phases of the business are covered, as well as bookkeeping and collecting practices; problems in contract, installment, and open account selling; and legal phases of credit granting and collection.

Prerequisite: BUS 121.

**BUS 222 INTERMEDIATE ACCOUNTING I**

4 2 5

Thorough treatment of the field of general accounting, providing the necessary foundation for specialized studies that follow. The course includes, among other aspects, the balance sheet, income and surplus statements, fundamental processes of recording, cash and temporary investments, and analysis of working capital.

Prerequisite: BUS 122.

**BUS 223 INTERMEDIATE ACCOUNTING II**

4 2 5

Additional study of intermediate accounting with emphasis on investments, plant and equipment, intangible assets and deferred charges, long-term liabilities, paid-in capital, retained earnings, and special analytical processes.

Prerequisite: BUS 222.

**BUS 225 COST ACCOUNTING**

3 2 4

Nature and purposes of cost accounting; accounting for direct labor, materials, and factory burden; job cost, and standard cost principles and procedures; selling and distribution cost; budgets, and executive use of cost figures.

Prerequisite: BUS 122.

**BUS 226 PAYROLL ACCOUNTING**

3 0 3

The various phases of the Social Security Act and other laws relating to the payment of wages and salaries. Emphasis is on the basic payroll systems and accounting methods used in computing wages and the time-keeping systems used to record time worked.

Prerequisite: BUS 120.

**BUS 229 TAXES I**

3 2 4

Application of federal and state taxes to individuals and business proprietorship. A study of following taxes: City and County Property, N. C. Sales and Use, N. C. Intangibles, Payroll, and Income. Practical experience with actual tax forms.

Prerequisite: BUS 121.

**BUS 230 TAXES II**

3 2 4

A continuation of BUS 229. Additional study includes the application of federal and state taxes to individuals, business partnerships, and corporations. Practical experience with actual tax forms.

Prerequisite: BUS 229.

**BUS 232 SALES DEVELOPMENT**

3 0 3

This course emphasizes the need for creative selling in the American economy. The selling process is analyzed in terms of customer buying motives and behavior, techniques of making an effective sales presentation, and methods of building customer goodwill. Sales demonstrations allow students to develop individual skill in meeting selling problems encountered.

Prerequisite: None.

**BUS 235 BUSINESS MANAGEMENT**

3 2 4

The study of major functions of management, such as planning, organizing, staffing, directing, and controlling. Clarification of the decision-making function versus the operating function. Role of management in business—qualifications and requirements.

Prerequisite: None.

**BUS 239 MARKETING**

5 0 5

A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in the marketing process.

Prerequisite: ECO 102.

**BUS 245 RETAILING****3 0 3**

A study of retailing in the economy, including development of our present retail structure, functions performed, principles governing effective operations and managerial problems resulting from current economic and social trends.

Prerequisite: None.

**BUS 247 BUSINESS INSURANCE****3 0 3**

The basic principles underlying risk insurance and the scope of coverage under the several divisions of insurance including life, health, fire, marine, casualty, automobile, and workmen's compensation coverage. The subject is considered from the viewpoints of personal, business, social, and special group needs. The newer forms of coverage are given special attention.

Prerequisite: None.

**BUS 269 AUDITING****3 2 4**

Principles of conducting audits and investigations; setting up accounts based on audits; collecting data on working papers; arranging and systemizing the audit, and writing the audit report. Emphasis placed on detailed audits, internal auditing, and internal control.

Prerequisite: BUS 223.

**BUS 271 OFFICE MANAGEMENT****3 2 4**

An application of the principles of management to the planning, organization and controlling of office work, the direction and control of services and performance, simplification of procedures and methods, and establishment of standards, planning of physical facilities, and business forms.

Prerequisite: None.

**BUS 272 PRINCIPLES OF SUPERVISION****3 0 3**

Basic responsibilities and duties of the supervisor and his relationship to superiors, subordinates, and associates. Emphasis is on securing an effective work force and methods of supervision.

Prerequisite: None.

**ELECTRONICS**

Course Title		Quarter
	Class	Hours
	Lab.	Credit

**ELC 112 ELECTRICAL FUNDAMENTALS I****5 6 7**

A qualitative study of units of measurement, electrical quantities, simple circuits, electromotive forces, current, power laws, basic electrical instruments and measurements, resistance, impedance and basic

circuit components. Concepts taught are generally limited to fundamentals with very little emphasis placed on quantitative aspects. Laboratory work will teach the proper use and care of basic hand tools and the basic manual skills used in working with electricity. Measurement techniques and safety practices will be stressed throughout.

Prerequisite: None.

**ELC 113 ELECTRICAL FUNDAMENTALS II****5 6 7**

Additional electrical concepts and circuit analysis procedures as applied to more complex two terminal and simple two port networks are introduced. Laboratory work will include additional measurement techniques with emphasis on verification of theoretical concepts.

Prerequisite: ELC 112 or MAT 101.

**ELC 114 ELECTRICAL FUNDAMENTALS III****3 2 4**

Advance circuit analysis techniques as applied to two port passive networks are introduced with emphasis on analysis and mathematical computations. Laboratory experiences are used to support analysis activities.

Prerequisite: ELC 113 or MAT 102.

**ELN 104 INTRODUCTION TO ELECTRONIC DATA PROCESSING SYSTEMS****3 2 4**

An introductory course designed to acquaint the student with the field of data processing. Includes a historical review of data processing, basic terminology, and fundamental concepts of data processing and programming. Laboratory exercises devoted to familiarizing the student with basic data processing equipment.

**ELN 121 ELECTRONICS I****3 4 5**

Presents qualitative electronics concepts beginning with systems and networks and proceeding to devices. Typical networks such as power supplies, amplifiers, oscillators, and feedback circuits are introduced. Solid state devices and vacuum tubes are introduced as idealized devices. Experience is provided in basic troubleshooting techniques. Instruments are introduced as needed for simple testing and measurements.

Corequisite: ELC 113.

**ELN 122 ELECTRONICS II****5 6 7**

A quantitative study beginning with active control devices and proceeding to networks. A variety of equivalent circuit models are used to evaluate device and system parameters and predict circuit performance. Instruments are used in the lab to collect data, verify math predictions, and troubleshoot.

Prerequisite: ELN 121.

**ELN 123 ELECTRONICS III****3 4 5**

Continues the study of active networks. Emphasis is on the analysis

and design of both networks and active circuits. In addition, fundamentals, design techniques and typical applications of linear integrated circuits are introduced.

Prerequisite: ELN 122 or MAT 103.

**ELN 218 PULSE, LOGIC AND DIGITAL CIRCUITS 3 4 5**

Emphasizes the study of wave shaping non-sinusoidal wave generating circuits using discrete and integrated components. Wave shaping topics include: simple passive waveshaping circuits and more complicated waveshaping circuits using active devices. Topics covered under non-sinusoidal wave generating circuits include: multivibrators, sweep generators, and other types of special purpose circuits using discrete and integrated components. An introduction to Boolean algebra and its applications for the simplification of logic circuits is also included.

Prerequisite: ELN 123.

**ELN 219 DIGITAL FUNDAMENTALS 3 4 5**

Emphasizes the study of combinational and sequential logic circuits using discrete and integrated components. Topics include: binary arithmetic, numbering systems, Boolean algebra, storing, timing, gating, and counting. Typical applications in industry will be presented.

Prerequisite: ELN 123.

**ELN 220 ELECTRONIC SYSTEMS I 4 4 5**

A general survey of electronic systems with emphasis on their description in block diagram format. Systems to be studied are those used in communications, computing, measurement, automatic control, and others of a specialized nature as appropriate.

Prerequisite: ELN 123.

**ELN 222 ELECTRONICS SYSTEMS II 5 4 7**

(Specialized Elective)

Options: (A) Communications, (B) Computers, or (C) Automatic Control.

**ELN 222 ELECTRONIC SYSTEMS II: (A) COMMUNICATIONS 5 4 7**

Introduction to fundamental aspects of electronic communication systems with special emphasis on need for modulation, types of modulation, frequency spectra and bandwidth requirements. Qualitative study of the principles of AM, SSB, and FM including the generation and detection of signals and their frequency spectra. Transmission and propagation of radio signals will be studied.

Prerequisite: ELN 220.

**ELN 222 ELECTRONIC SYSTEMS II: (B) COMPUTERS 5 4 7**

The course consists of a functional block diagram analysis of a number of digital computer systems. Emphasis is placed on the mini/micro computer variety currently being used in industry. The lab will

provide practice in manipulating the hardware and software associated with such computers.

Prerequisite: ELN 220.

**ELN 222 ELECTRONIC SYSTEMS II: (C) AUTOMATIC CONTROL 5 4 7**

Automatic control concepts including calibration, measurement and standards are introduced. Laboratory exercises are provided on simulated or generalized measurement and control systems that include indicators, recorders, and controllers. Emphasis is placed on process or system stability using various types of controllers. Final control elements and their characteristics are studied. Graphical analyses and solutions of process control systems are included.

Prerequisite: ELN 220.

**ELN 224 ELECTRONICS SYSTEMS III 5 4 7**

Options: (A) Communications, (B) Computers, or (C) Automatic Control.

**ELN 224 ELECTRONICS SYSTEMS III: (A) COMMUNICATIONS 5 4 7**

Study of specialized electronic communication systems such as TV, microwave, radar, and optical communication systems. Discussion of sampling and pulse systems including techniques of multiplexing such as PAM, PDM, PCM, and PPM.

Prerequisite: ELN 222.

**ELN 224 ELECTRONIC SYSTEMS III: (B) COMPUTERS 5 4 7**

This course deals with the detailed theory of the computer systems previously covered followed by troubleshooting and maintenance procedures. The lab consists of digital measurements in support of operation theory followed by actual troubleshooting practice, dealing with systems analysis and diagnostic procedures.

Prerequisite: ELN 222.

**ELN 224 ELECTRONIC SYSTEMS III: (C) AUTOMATIC CONTROL 5 4 7**

A study of automatic control theory and processes including the characteristics and mathematical models of linear systems. Practice is provided in specifying and selecting process or automatic control parameters and equipment. Electronic and mechanical controls are introduced as well as the use of the minicomputer in the control loop. Practical analysis and evaluation on actual or simulated processes or systems is covered in the laboratory.

Prerequisite: ELN 222.

**ELN 246 ELECTRONICS DESIGN PROJECT 0 6 3**

A laboratory class emphasizing independent research and design work by the student. The student will select a project in consultation with

the instructor; perform the required research; compile data; formulate a theoretical model; and construct, test, and evaluate a working model of the selected project.

Prerequisite: ELN 220.

## FLORAL DESIGN

Course Title	Quarter Hours		
	Class	Lab	Credit
<b>AGR 185 SOIL SCIENCE FERTILIZERS</b>	<b>3</b>	<b>2</b>	<b>4</b>
A course dealing with the basic principles of efficient classification, evaluation, and management of soils; care, cultivation and fertilization of the soil, and conservation of soil fertility.			
<b>FLO 101 FLORAL DESIGN I</b>	<b>3</b>	<b>4</b>	<b>5</b>
An introduction to the language of the industry through business procedures and its products. A basic study of floral supplies, design, tools, color and production methods. A study of buying perishables and non-perishable items and their storage and care. Students will be given study cases of national, international, and local membership agencies for florists. A study of the history and principles of flower arrangements.			
<b>FLO 102 FLORAL DESIGN II</b>	<b>2</b>	<b>4</b>	<b>4</b>
A course dealing with geometric design of floral arrangements. With the use of artificial flowers, each student will design corsages, hospital arrangements, novelties, and funeral designs. Student designs will become a part of subject matter with visual marketing value. Price, mark-up, and profit will be studied with each design.			
<b>FLO 103 FLORAL DESIGN III</b>	<b>2</b>	<b>5</b>	<b>4</b>
Basic study of a flower shop interior and exterior. A layout will be made of a flower shop for a complete study of sight and location, time and motion, lighting, equipment, display window, work room and sales area. Introduction to wedding equipment and fashions and styles of wedding bouquets. Relationship of florist and church, wedding rehearsals and methods of formal decorations.			
<b>FLO 112 FLORAL ART AND COLOR</b>	<b>3</b>	<b>0</b>	<b>3</b>
The objective of this course is to acquaint the student with a thinking and seeing process to put hand and mind in coordination; to create shape—form—mass, and rhythm. Learn to create geometric forms that spark the imagination of dimension through association of color and interior design.			

## FLO 199 WORK EXPERIENCE AND ASSIGNMENT IN EXOTIC HOUSE PLANTS

**0 40 4**

This course consists of one quarter of supervised cooperative work experience of approximately 11 weeks at 40 hours each, or approximately 440 total hours awarding 4 quarter hours credit. The objective of this course is to provide the student—before graduation from his curriculum—a real working practice in an environment. This period of time will enable the student to use the equipment and perform the processes and services required of his specialty under close supervision and with responsibilities commensurate with his capabilities. The cooperative work experience period will be carefully planned and closely supervised by both the educational institution, the student, and the agency or business will provide for a programmed sequence of activities for the educational elements of the work clearly defined.

### FLO 204 FLORAL DESIGN IV

**3 6 6**

A course dealing with basic principles of taking orders over the telephone—learning to sell an item that the customer does not see. Actual experience through classroom exercises with the use of a telephone system. Merchandising, mass market outlets, and cash-and-carry of perishable and non-perishable items. A review of the history and creative ability of flower arrangements.

### FLO 205 FLORAL DESIGN V

**2 8 6**

A continued study of all geometric design forms with the use of fresh flowers: holiday, hospital, funeral and novelties.

### FLO 206 FLORAL DESIGN VI

**2 4 4**

The objective of this course is to develop creative design in formal and informal products manufactured in the Floral and Horticulture field. The students continue to develop their artistic ability through sampling the market with their product.

### FLO 221 SPECIALTY PURCHASING

**3 0 3**

Presents the fundamental principles of buying those supplies required by the florist. Deals with sources for those supplies, methods of ordering to provide these services when needed, and adapting orders to concur with consumer demands.

### FLO 237 FLORAL SHOP OPERATION AND MANAGEMENT

**4 6 7**

The objective of this course is to let each student open a prototype shop with purchasing of equipment and a bookkeeping system. They will follow through the operation and management of a Flower Shop and Nursery.

### HOR 150 GENERAL HORTICULTURE

**3 2 4**

Application of those principles studied in plant science to horticultural practices. Time will be devoted to the study of those cultural practices

necessary for growing landscape plants both in a controlled environment as well as open field planting. In addition the students will be introduced to plant propagation and its application.

**HOR 160 PLANT IDENTIFICATION I 5 0 5**

A study of identification, classification, adaptation, and the nomenclature of its use and care of all tropical plants sold in the Floral industry.

**HOR 161 PLANT IDENTIFICATION II 3 0 3**

A study of identification, adaptation, and use of ornamental trees, shrubs, vines and herbaceous plants.

**HOR 170 PLANT DISEASE AND PEST CONTROL 5 2 6**

The objective of this course is to study the major causes of disease in plants including bacteria, fungi, nematodes, viruses, and parasitic seed plants. Emphasis will be placed on recognition of symptoms of the main types of diseases affecting crops in N. C. and the methods by which these diseases may be controlled. Proper use of fungicides, soil fumigants and other practical control measures will be discussed.

**HOR 230 LANDSCAPE MAINTENANCE 2 4 4**

A study of the maintenance of landscaped areas including planting, pruning, fertilization and pest control of lawns, golf courses, shrubs, trees and bedding of annuals and perennials.

**HOR 251 LANDSCAPE PLANNING I 2 2 3**

An introductory study of the basic principles of landscape design. Considerable emphasis is placed upon the problems associated with residential site development. The course offers a section devoted to blueprint reading. Considerable laboratory time is devoted to visitations to established residential sites. The course is not oriented toward a mastery of creativity and artistry but simply toward an understanding of certain basic principles fundamental to all landscape design endeavors.

**HOR 252 LANDSCAPE PLANNING II 2 4 2**

Development and maintenance of landscape areas including planning, pruning, fertilization, and pest control. Fundamentals of landscape economics such as costs, contracts, calculating areas, volumes, and plant quantities for landscape projects. Selection and use of materials in landscape construction.

**HOR 254 PLANT PROPAGATION 2 4 4**

A study of basic concepts and principles of sexual and asexual propagation. Techniques are learned through practical exercises conducted in laboratory sessions. Emphasis is given to those propagation methods widely utilized in the nursery industry.

**HOR 256 NURSERY PLANTS AND FLOWER PRODUCTION**

**3 0 3**

A study of container field growing vegetable and flower plant production. Experience will be gained in specific practices such as planting, fertilization, pruning, weed control, irrigation, digging and baling; marketing of nursery crops will be considered.

**GENERAL EDUCATION**

Course Title	Semester Hours		
	Class	Lab.	Credit
<b>ART 105 INTRODUCTION TO ART</b>	<b>3</b>	<b>0</b>	<b>3</b>
Intensive analysis of selected monuments and artists.			
<b>ATY 101 MAN IN NATURE</b>	<b>3</b>	<b>0</b>	<b>3</b>
Anthropology's answers to the question, "What is Man?" A basic understanding of the human condition, i.e., man and his place in nature. Anthropology and human problems.			
<b>BIO 101 PRINCIPLES OF BIOLOGY</b>	<b>2</b>	<b>3</b>	<b>3</b>
Emphasis is placed on the philosophical basis of science, the material and cellular basis of life, ecological principles, evolution by means of natural selection, and the diversity of living things.			
<b>BIO 102 PRINCIPLES OF BIOLOGY</b>	<b>2</b>	<b>3</b>	<b>3</b>
Basic coverage of cellular and organismic reproduction, patterns of inheritance, development, evolution and maintenance of homeostasis.			
<b>CHE 103 GENERAL DESCRIPTIVE CHEMISTRY</b>	<b>3</b>	<b>0</b>	<b>3</b>
The first semester of an introductory course for students whose programs require one year of college chemistry. Among the topics introduced are: states of matter, atomic and molecular structure and chemical equilibrium.			
<b>ECO 201 INTRODUCTORY MICROECONOMICS</b>	<b>3</b>	<b>0</b>	<b>3</b>
An introduction to microeconomic principles and methods of analysis. The application of microeconomic analysis to selected social issues. Topics include the market system, supply and demand and cost benefit analysis. These principles are studied in the context of specific social problems.			
<b>ECO 202 INTRODUCTORY MACROECONOMICS AND SOCIAL ISSUES</b>	<b>3</b>	<b>0</b>	<b>3</b>
An introduction to elementary macroeconomics principles and methods of analysis. The application of macroeconomic principles to selected social issues. Topics include national income, the monetary system,			

inflation, recession, the national debt, international trade and economic growth.

**ENG 101 ENGLISH COMPOSITION 3 0 3**  
102

A course designed to develop the student's ability to read with discrimination and to write effectively. First semester: practice in expository writing; the study of shorter works of fiction and essays. Second semester: continued practice in writing exposition; practice in the use of source materials; the study of poetry and plays.

**ENG 105 APPROACH TO FICTION 3 0 3**

Reading and analysis of representative American and English novels and short stories, including the contemporary; introduction to critical concepts and vocabulary useful in the study and evaluation of fiction.

**ENG 211 ENGLISH LITERATURE 3 0 3**  
212

Introduction to English literature. Emphasis on interpretation and intelligent appreciation of literary masterpieces.

**ENG 251 AMERICAN LITERATURE FROM THE BEGINNINGS TO THE CIVIL WAR 3 0 3**

American culture and literature from early colonial times through Lincoln. Emphasis on expansion of the American mind.

**ENG 252 AMERICAN LITERATURE FROM THE CIVIL WAR TO THE PRESENT 3 0 3**

American literature from 1850 to the present. Emphasis on Civil War and Reconstruction, westward expansion, the local color movement and regionalism, rise of realism, development of social revolt and beginning of naturalism.

**FRE 101 ELEMENTARY FRENCH 3 0 3**  
102

Introduction to the French language with practice in listening, speaking, writing, and reading. Supplementary instruction in the language laboratory.

**GEO 211 PHYSICAL GEOGRAPHY 2 3 3**  
212

An introductory study of the earth's natural environment as it pertains to weather and climate (211); surface or terrain characteristics and their origin (212). Environmental problems involving land, water and atmosphere will also be considered. 212 may not be taken for credit along with 111.

**HEA 101 HEALTH 3 0 3**

To promote better living in the present and future through an understanding of pertinent health needs of the individual and community. Emphasis on the development of values and insights as a basis for

choices in meeting health problems. Primarily for freshmen. Health 101 (or 301 for upperclass students) required of all students seeking teacher certification. Elective for all others.

**HIS 101 MODERN EUROPEAN HISTORY 3 0 3**  
102

Since 1500, with backgrounds in ancient and medieval Europe.

**HIS 211 THE UNITED STATES 3 0 3**  
212

First semester: to 1865. Second semester: since 1865.

**MAT 101 DEVELOPMENTAL MATH 3 0 0**

Review of basic concepts in algebra.

**MAT 110 INTRODUCTION TO MATHEMATICS I 3 0 3**

Trigonometric (circular) functions, identities. Sets and numbers, inequalities permutations and combinations, mathematical induction, complex numbers, theory of equations, determinants, progressions.

**MAT 112 INTRODUCTION TO MATHEMATICS II 3 0 3**

Equations, exponential and logarithmic functions, triangles, coordinate systems, distances, lines in the plane, complex numbers.

**PE 123 SOFTBALL 3 0 1**

**PE 161 BEGINNING TENNIS 3 0 1**

**PE 163 VOLLEYBALL 3 0 1**

**PE 266 BEGINNING BOWLING 3 0 1**

**PHI 111 INTRODUCTION TO PHILOSOPHY 3 0 3**

Discussion of the views and methods of major philosophers. Consideration of such topics as the foundation and scope of human knowledge, personal identity, freedom and the concept of mind.

**PHI 115 ELEMENTARY LOGIC 3 0 3**

An introduction to basic principles of reasoning including the syllogism, truth tables, induction and probability, fallacies and related topics.

**PSC 105 POLITICAL ANALYSIS 3 0 3**

Introduction to the basic concepts, ideas, approaches and methods used to study political institutions and behavior. Emphasis on the fundamental aspects of politics in general rather than on specific societies or communities.

**PSY 221 GENERAL PSYCHOLOGY 3 0 3**

A survey of the field of psychology, which includes the study of psychology as a science, the nervous system, growth and development, sensory and perceptual processes, motivation, emotion, learning, per-

sonality (normal and pathological), statistics, testing, intelligence, and aptitudes and achievement.

**SOC 211 INTRODUCTION TO SOCIOLOGY** 3 0 3

Scientific study of social behavior including factors involved in functioning and development of human society as culture, personality, social organization, institutions, stratification, social process and social change.

Open to freshmen.

## PHOTOGRAPHY

Course Title	Quarter	Hours
	Class	Lab. Credit

**PHO 102 VISUAL STUDIES I** 2 6 5

Introduction to the formal elements of composition with emphasis on understanding the translation of chromatic and spatial experience to the surface of the black-and-white print. Major works from all of the visual media are discussed and an historical framework is established for understanding the evolution of modern visual ideas. Problems of formal resolution are explored in photographic assignments coordinated with PHO 109.

Prerequisite: None.

**PHO 104 VISUAL STUDIES II** 2 6 5

Continuation of PHO 102 with emphasis on color as perceived and as represented by photographic color materials. Work by contemporary photographers is analyzed to demonstrate the principles of subject illustration and the allusive functions of formal elements underlying impact, interest, and content. Further attention is given the student's perception and understanding of picture space. Formal problems are assigned in coordination with PHO 111.

Prerequisite: PHO 102.

**PHO 105 PHOTOCHEMISTRY** 3 3 4

Brief review of basic chemistry followed by detailed study of the reactions underlying photographic processes. Basic photographic laboratory methods and calculations are introduced.

Prerequisite: None.

**PHO 106 VISUAL STUDIES III** 2 6 5

Continuation of PHO 104. The influences of photographic technique on the vision of the photographer and his public are explored in detail. Repetition, sequence, randomness, etc., are traced from their origin in the medium to their effect on contemporary professional work.

Special attention is given the photographer's use of formal control in satisfying public demand: the balance between innovation for maximum effect and the client's requirement for sound illustration. The problems of professional style are analyzed. Assignments emphasizing rapid, economic, but innovative solutions to limited professional problems are coordinated with PHO 214.

Prerequisite: PHO 104.

**PHO 107 FUNDAMENTALS OF PHOTOGRAPHY** 3 9 6

Introduction to the principles governing image formation. Light, optics, camera mechanics, and latent image are discussed in detail. Development and the characteristic curve are treated broadly to fully establish the relationship of subject and image. Laboratory problems stress the use of black-and-white film-and-paper standard under widely varying subject conditions to insure the student's understanding of the photographic process. A consistent darkroom method is emphasized.

Prerequisite: None.

**PHO 109 LARGE FORMAT PHOTOGRAPHY I** 3 9 6

Introduction of the view camera with emphasis on its application in architectural illustration and portraiture. A variety of black-and-white films and commercial and portrait papers are used in problems coordinated with PHO 115. Negative and print retouching, preparation of prints for toning and coloring, job expediting and costing are introduced. Lighting including quartz and electronic flash.

Prerequisite: PHO 107.

**PHO 110 PROCESS CONTROL** 3 6 6

A study of photographic quality control systems. Measurement, evaluation, and control of photographic processes using densitometry, sensitometry, and related monitoring systems. Control systems for continuous processing of film, papers, and chemistry will be covered.

Prerequisite: None.

**PHO III LARGE FORMAT PHOTOGRAPHY II** 3 9 6

A continuation of PHO 109 with the introduction of color materials in problems coordinated with PHO 117. Camera assignments emphasize portraiture, product and service illustration. Advanced lighting, printing and retouching techniques are introduced.

Prerequisite: PHO 109.

**PHO 112 INTRODUCTION TO MACHINE PROCESSING** 2 6 4

Photographic processing mechanisms, nomenclature, design and function of various machines, currently used in the photofinishing, professional finishing and school finishing industries.

Prerequisite: PHO 110.

**PHO 115 MATERIALS AND PROCESSES I** 3 3 4

Detailed study of the primary materials and processes of black-and-white photography. Theory and mechanics of light. Emulsions and sensitometry of emulsions are discussed in addition to their relationships with processing effects. Densitometry is studied as the end result of the photographic effect.

Prerequisite: PHO 105, PHO 107.

**PHO 117 MATERIALS AND PROCESSES II** 3 3 4

Detailed study of the primary materials and processes of color photography. Qualities of light and methods of light analysis are studied. Color sensitometry and densitometry are studied as quality control measures in color processing.

Prerequisite: PHO 115.

**PHO 118 AUTOMATED MACHINE PRINTING** 3 9 6

A study of automated printers; nomenclature, design, function and use. Modification for other uses. Printers for black-and-white and color; additive and subtractive color printing methods. Exposure control and color balance of printers. Multiple exposure package printers.

Prerequisite: None.

**PHO 119 CUSTOM FINISHING** 2 8 6

Actual printing and processing a variety of sizes up to 30 inch x 40 inch. Production printing on rolls and individual cut sheets will be done. Use of various electrical systems for determination of color balance. Quality assurance program matching print quality to the standards of the industry. Emphasis on craftsmanship.

Prerequisite: PHO 120.

**PHO 120 AUTOMATED PHOTOGRAPHIC PROCESSES** 2 18 8

Study and use of various processing systems. Actual processing experience and quality control of processes both black-and-white and color negative, positive, and transparency.

Prerequisite: PHO 112.

**PHO 121 INDUSTRIAL TECHNOLOGY I** 3 0 3

Introduction to the materials and methods used in electrical wiring and in metal and plastic plumbing commonly applied in photographic studio and laboratory installations.

Prerequisite: None.

**PHO 122 AUTOMATED PRINTING MECHANICS** 2 12 8

Printer set up procedures, operation, maintenance, adjustments, and installation of accessories. Wiring diagrams, operation sequence of printers and quality control of print production.

Prerequisite: PHO 120.

**PHO 123 INDUSTRIAL TECHNOLOGY II** 2 0 2

Introduction to electronic components and circuits commonly used in photographic equipment and facilities.

Prerequisite: PHO 121.

**PHO 126 PHOTOGRAPHIC MACHINE MAINTENANCE** 2 12 6

Major and minor maintenance on printers, both film and paper processors, temperature control systems, pumps, and other related parts for processing equipment.

Prerequisite: PHO 120.

**PHO 131 PRODUCTION TECHNIQUE I** 0 15 5

Day to day operation of an automated processing and finishing laboratory. Production schedules, quality control of all processes in the lab. Actual printing, processing, and finishing of black-and-white and color prints. Large size print finishing includes lacquer spraying, re-touching, air brushing, and spotting.

Prerequisite: PHO 120.

**PHO 133 PRODUCTION TECHNIQUE II** 0 30 10

A continuation of Production Technique I with additional emphasis on professional procedures and processes. Students will be involved with automated processing and finishing on a full production basis.

Prerequisite: PHO 131.

**PHO 199 CONTROLLED WORK EXPERIENCE** 11 346 6

This course consists of one quarter of supervised cooperative work experience of approximately 7 weeks at 40 hours each, or approximately 280 total hours awarding 3 quarter hours credit. The objective of this course is to provide the student—before graduation from his curriculum — a real working practice in an environment which he will experience after graduation and upon employment. This period of time will enable the student to use the equipment and perform the processes and services required of his specialty under close supervision and with responsibilities commensurate with his capabilities. The cooperative work experience period will be carefully planned and closely supervised by both the educational institution where the student is enrolled and the agency or business where the student is employed. An official agreement among the educational institution, the student, and the agency or business will provide for a programmed sequence of activities to be performed by the student with supervisory responsibilities for the educational elements of the work clearly defined.

**PHO 214 SMALL FORMAT PHOTOGRAPHY** 4 12 8

Introduction of the small format camera and its application in news photography and photojournalism, public relations and audio-visual presentations. Black-and-white and color materials are used in problems requiring modifications in lighting and processing to achieve

prescribed results. Study includes a survey of the major small format systems in current use.

Prerequisite: PHO 111.

#### **PHO 216 PROFESSIONAL FIELDS OF PHOTOGRAPHY I 4 18 10**

A practical familiarization and study of the various areas of professional photography. Field trips, guest lecturers, workshops, and professional conventions are an important part of the course. Advanced techniques in camera operation, lighting, exposure, and subject organization are studied through problems assigned and evaluated on the basis of professional standards.

Prerequisite: PHO 214.

#### **PHO 220 PROFESSIONAL FIELDS OF PHOTOGRAPHY II 3 21 10**

A continuation of PHO 216 in which the student refines marketable skills in the specific field he has chosen for employment. Emphasis is placed on consistent, quality production within economic limits of time and materials.

Prerequisite: PHO 216.

### **RELATED COURSES (Photography)**

#### **ELN 213 ELECTRONIC IMAGING SYSTEMS 3 0 3**

A study of the theory of converting images to electrical signals which may be displayed or stored electronically. The course will include the theory of magnetic tape recording, cathode ray tube display and digital techniques for image signal conversion and storage.

Prerequisite: ELN 113 or equivalent.

### **ELECTIVES IN PHOTOGRAPHY**

Course Title	Quarter		
	Class	Lab.	Credit
<b>PHO 128 SURVEY OF AUTOMATED PROCESSES</b>	<b>2</b>	<b>0</b>	<b>2</b>
Introduction to automated printing systems, transport systems for film and paper processing, timing devices, and chemistry for automated processing. The course informs the photographer generalist in the selection of small equipment for his own laboratory and in his use of professional finishing services by defining the advantages and limitations of systems in current use.			
Prerequisite: PHO 117.			

#### **PHO 135 ASSIGNMENT PRODUCTION 0 6 2**

Individual creative approach to production problem solving. The student is encouraged to develop his own printing and finishing skill. Emphasis is on individual technique and craftsmanship. Portfolio development with instructor guidance.

Prerequisite: PHO 120.

#### **PHO 137 PHOTOGRAPHIC MARKET RESEARCH 0 6 2**

Research of the market potential in a selected geographic area for the establishment of a small photographic business: portrait studio, finishing plant, etc. The student works under the guidance of a business instructor and photography instructor in preparing a detailed assessment of the locale and the advisability of the proposed venture.

Prerequisite: BUS 195, PHO 111 or PHO 120.

#### **PHO 227 GRAPHIC ARTS SURVEY 2 0 2**

Survey of the technology of letterpress, offset, and gravure reproduction of the photographic image. Special consideration is given the qualities required of the initial image and the transformation of the image effected by the printing process.

Prerequisite: None.

#### **PHO 240 PORTFOLIO DEVELOPMENT 0 6 2**

Specialized photographic work intended to complement the product of the student's class assignments. A format for presentation is selected and the student assembles a consistent body of work to demonstrate his understanding of photography. Emphasis is placed on the professional area of the student's choice.

Prerequisite: PHO 111.

#### **PHO 244 SMALL STUDIO CRAFTS 0 6 2**

Practice in the crafts associated with the operation of a small studio: oil coloring, specialty matting, framing, album presentations, advanced retouching, backdrop preparation, display methods, etc.

Prerequisite: PHO 109.

#### **PHO 251 HISTORY OF PHOTOGRAPHY 2 0 2**

Survey of major technical and aesthetic achievements from Niepce to the present. Special concern is given to the relationship of technical advance, visual exploration, and the work of the professional community. The effect of photography on other applied media is also considered.

Prerequisite: None.

### **RELATED COURSES (Business)**

Course Title	Quarter		
	Class	Lab.	Credit
<b>BUS 236 BUSINESS PRACTICES &amp; PRINCIPLES FOR INTERIOR DESIGN</b>	<b>3</b>	<b>0</b>	<b>3</b>

This course is designed to introduce the students of Interior Design to business organizations and procedures and how they are structured in relation to the practices of Interior Design. The student will study

specific forms, such as, contracts, letters of agreement, invoices, etc., that relate to legal and economic as well as professional obligations.  
Prerequisite: None.

**BUS 281 HUMAN RELATIONS IN BUSINESS 3 0 3**

A course designed to acquaint the student with basic human psychology, with emphasis on the importance of effective human relationships in business situations as well as in daily living.

Prerequisites: None.

**ECO 102 ECONOMICS 3 0 3**

The fundamental principles of economics, including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand, and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large.

Prerequisite: None.

**ECO 104 ECONOMICS 3 0 3**

Greater depth in principles of economics, including a penetration into the composition and pricing of national output, distribution of income, international trade and finance, and current economic problems.

Prerequisite: ECO 102.

**EDP 104 INTRODUCTION TO DATA PROCESSING 3 2 4**

An introductory course designed to acquaint the student with the field of data processing. Includes a historical review of data processing, basic terminology, and fundamental concepts of data processing and programming. Laboratory exercises devoted to familiarizing the student with basic data processing equipment.

Prerequisite: None.

## DRAFTING

Course Title	Quarter Hours		
	Class	Lab.	Credit
<b>DFT 101 TECHNICAL DRAFTING</b>	<b>0</b>	<b>6</b>	<b>2</b>

The field of drafting is introduced as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are: use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, and standard and practices of dimensioning. The principles of isometric, oblique and perspective are introduced.

Prerequisite: None.

**DFT 102 TECHNICAL DRAFTING 0 6 2**

The application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and successive revolutions, and sections and conventions will be studied. Most important is the introduction of the graphic analysis of space problems. Problems of practical design elements involving points, lines, planes, and a combination of these elements shall be studied. Dimensioning practices for "details" and "working drawings", approved by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometrical objects.

Prerequisite: DFT 101.

**DFT 108 ARCHITECTURAL DRAFTING 0 6 2**

An approach in depth to the study of architectural drafting, development of techniques in architectural lettering, dimensioning, freehand sketching and instrument drawing. Drawing of construction details, using appropriate material symbols and conventions, and working drawings, including plans, elevations, sections, scale details, and full size details will be prepared from preliminary sketches.

Prerequisite: DFT 101.

**DFT 140 LAYOUT DRAFTING 0 6 2**

Continuation of Drafting with emphasis placed on sample room layouts, both residential and commercial; recognizing existing problems, structural changes and remodeling. Problems will be given making use of architectural floor plans and their solutions with a prescribed number of furniture items and equipment.

Prerequisite: DFT 108.

## ENGLISH

Course Title	Quarter Hours		
	Class	Lab.	Credit
<b>ENG 101 TECHNICAL COMMUNICATIONS</b>	<b>3</b>	<b>0</b>	<b>3</b>

Designed to aid students in the improvement of communication skills to express ideas and technical information. Emphasis is on speaking and on writing the sentence, paragraph, and the whole composition with attention to grammar as the need arises. Intended to stimulate students to apply the accepted principles of English usage in their day-to-day situations in industry and social life.

Prerequisite: None.

**ENG 102 TECHNICAL COMMUNICATIONS 3 0 3**

Continuation of English 101. Technical Communications.

Prerequisite: ENG 101.

**ENG 103 REPORT WRITING** 3 0 3

The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum.

Prerequisite: ENG 102.

**ENG 109 COMMUNICATION SKILLS** 3 0 3

Practice in writing reports, both formal and informal, such as may be required on the job with much attention to the various levels of language use that different audiences require. Speaking and writing assignments will emphasize conciseness, clarity, and unity.

**ENG III ORAL COMMUNICATIONS** 3 0 3

A practical study of oral communications with practice in realistic speaking situations. Emphasis is placed on small group and one-to-one communication. Attention is given to oral presentation of ideas, use of standard English, and effective listening.

**ENG 204 ORAL COMMUNICATIONS** 3 0 3

A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits and to produce effective oral presentation. Particular attention given to conducting meetings, conferences, and interviews.

Prerequisite: ENG 101.

**ENG 206 BUSINESS COMMUNICATION** 3 0 3

A comprehensive study of the principles of effective business communications and the application of these principles to business reports, memorandums, and letters involving credit, collections, adjustments, complaints, orders, acknowledgments, remittances, and inquiry.

Prerequisite: ENG 102.

**MATHEMATICS**

Course Title

Quarter  
Hours  
Class Lab. Credit

**MAT 101 TECHNICAL MATHEMATICS** 5 0 5

The real number system is developed as an extension of natural numbers. Number systems of various bases are introduced. Fundamental algebraic operations, the rectangular coordinate system, as

well as fundamental trigonometric concepts and operations are introduced. The application of these principles to practical problems is stressed.

Prerequisite: Satisfactory evidence that admission requirements have been met.

**MAT 102 TECHNICAL MATHEMATICS** 5 0 5

A continuation of MAT 101. Advanced algebraic and trigonometric topics including quadratics, logarithms, determinants, progressions, the binomial expansion, complex numbers, solution of oblique triangles and graphs of the trigonometric functions are studied in depth.

Prerequisite: MAT 101.

**MAT 103 TECHNICAL MATHEMATICS** 5 0 5

The fundamental concepts of analytical geometry, differential and integral calculus are introduced. Topics included are graphing techniques, geometric and algebraic interpretation of the derivative, differentials, rate of change, the integral and basic integration techniques. Applications of these concepts to practical situations are stressed.

Prerequisite: MAT 102.

**MAT 110 BUSINESS MATHEMATICS** 5 0 5

This course stresses mathematical fundamentals applicable in the field of business. Topics include banking, payrolls, pricing, interest and discount, depreciation, metric system, and other pertinent uses of mathematics.

Prerequisite: None.

**MAT III BASIC MATHEMATICS** 5 0 5

Required math course for Interior Design and Commercial Graphics majors. The objective of this course is to review and to reinforce the four basic mathematical operations using whole numbers, fractions, and decimals. These skills will be applied to computing percentages, ratios, areas, volumes, equivalent fractions, and conversions involving metrics to English and English to metric units.

Prerequisite: None.

**MAT 201 TECHNICAL MATHEMATICS** 5 0 5

A continuation of MAT 103. More advanced concepts of differentiation and integration are considered. Included are graphs and derivatives of the trigonometric functions, exponential and logarithmic differentiation and integration, advanced integration techniques, polar equations, parametric equations, and Fourier series.

Prerequisite: MAT 103.

## PHYSICS

Course Title	Class	Lab.	Quarter Hours Credit
<b>PHY 101 PHYSICS: PROPERTIES OF MATTER</b>	<b>3</b>	<b>2</b>	<b>4</b>
A fundamental course covering several basic principles of physics. The divisions included are solids and their characteristics, liquids at rest and in motion, gas laws and applications. Laboratory experiments and specialized problems dealing with these topics are part of this course. Prerequisite: None.			
<b>PHY 102 PHYSICS: WORK, ENERGY, POWER</b>	<b>3</b>	<b>2</b>	<b>4</b>
Major areas covered in this course are work, energy, and power. Instruction includes such topics as statics, forces, center of gravity and dynamics. Units of measurement and their applications are a vital part of this course. A practical approach is used in teaching students the use of essential mathematical formulas. Prerequisites: MAT 101, PHY 101.			
<b>PHY 104 PHYSICS: LIGHT AND SOUND</b>	<b>3</b>	<b>2</b>	<b>4</b>
A survey of the concepts involving wave motion leads to a study of sound, its generation, transmission and detection. The principles of wave motion also serve as an introduction to a study of light, illumination and the principles involved in optical instruments. Application is stressed throughout. Prerequisites: MAT 101, PHY 101.			

## SOCIAL SCIENCE

Course Title	Class	Lab.	Quarter Hours Credit
<b>PSY 112 PERSONALITY DEVELOPMENT</b>	<b>3</b>	<b>0</b>	<b>3</b>
Designed to help the young woman make the most of her potential over and beyond her acquired job skills. The course is tailored to the needs of the business career woman. Emphasis is placed on grooming, nutrition, exercise and posture, personal and professional relationships, and etiquette. Prerequisite: None.			
<b>PSY 209 SOCIAL ASPECTS OF ADVERTISING</b>	<b>3</b>	<b>0</b>	<b>3</b>
A survey of the advertising industry exploring the social aspects of advertising. Course content includes the survey of psychological and socio-economic factors that influence consumer buying decisions, demographic and psychographic market information, basic requirements of mass communication, regulatory agencies and advertising, and the pros and cons of advertising. Prerequisite: CAT 101.			
<b>SSC 232 SOCIAL HISTORY OF FURNITURE AND DECORATING</b>	<b>3</b>	<b>0</b>	<b>3</b>

A social history of post-medieval France and England; American and Oriental cultures as expressed in their respective decorative arts.  
Prerequisite: None.

## SOCIAL SCIENCE ELECTIVES

<b>ECO 108 CONSUMER ECONOMICS</b>	<b>3</b>	<b>0</b>	<b>3</b>
Designed to give practical help to the person who wants to do a better job of managing his personal finances. A study of personal financial planning, budgeting, buying on credit, borrowing money, investing savings, buying all forms of insurance, home ownership, and estate planning.			
<b>BUS 195 SMALL BUSINESS OPERATIONS</b>	<b>3</b>	<b>0</b>	<b>3</b>
An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations.			
<b>SSC 215 ART &amp; DESIGN SEMINAR AND COLLOQUIUM</b>	<b>3</b>	<b>0</b>	<b>3</b>
A seminar course using guest speakers from disciplines directly and related to the Interior Design and Advertising Design professions addressing itself to the theme "The Designer in a Changing Society". Topics that are to be explored and discussed by students and speakers include the effect of changes in society upon the designer, designer/client relationships, trends and directions in contemporary art, the designer as a businessman, pros and cons of freelancing, the designer's legal obligations, to name a few.			

Course content for One-Year Diploma and Evening Certificate courses is outlined in the course descriptions to follow. One-Year Diploma courses are numbered 1000 through 1100. All courses are to be pursued in a normal sequence with prerequisite courses taken as indicated.

Provided for each course is the following information: course number, title, number of class, laboratory, and credit hours.

## AUTOMOTIVE (PME)

Course Title	Class	Lab.	Quarter Hours Credit
<b>AHR 1101 AUTOMOTIVE AIR CONDITIONING</b>	<b>2</b>	<b>3</b>	<b>3</b>
General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, the methods of operation, and control; proper handling of refrigerants in charging the system. Prerequisite: PHY 1102.			

**AUT 1121 BRAKING SYSTEMS****3 3 4**

A complete study of various braking systems employed on automobiles and light weight trucks. Emphasis is placed on how they operate, proper adjustment, and repair.

Prerequisite: PHY 1102.

**AUT 1123 AUTOMOTIVE CHASSIS AND SUSPENSION SYSTEMS****3 9 6**

Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of suspension, and steering systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, and front end alignment.

Prerequisite: PME 1102.

**AUT 1124 AUTOMOTIVE POWER TRAIN SYSTEMS****3 9 6**

Principles and functions of automotive power train systems: clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair.

Prerequisites: PHY 1102, AUT 1123.

**AUT 1125 AUTOMOTIVE SERVICING****3 9 6**

Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Troubleshooting of automotive systems, providing a full range of experiences in testing, adjusting, repairing and replacing.

Prerequisites: AUT 1123, AUT 1121, AHR 1101.

**PME 1101 INTERNAL COMBUSTION ENGINES****3 12 7**

Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems; proper lubrication; and methods of testing, diagnosing and repairing.

Prerequisite: None.

**PME 1102 ENGINE ELECTRICAL AND FUEL SYSTEMS****5 12 9**

A thorough study of the electrical and fuel systems of the automobile. Battery cranking mechanism, generator, ignition, accessories and wiring; fuel pumps, carburetors, and fuel injectors. Characteristics of fuels, types of fuel systems, special tools, and testing equipment for the fuel and electrical system.

**ELECTRICAL MAINTENANCE**

Course Title

Quarter  
Hours  
Class Lab. Credit

**ELC 1112****DIRECT AND ALTERNATING CURRENT****5 12 9**

A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. An analysis of direct current circuits by Ohm's Law and Kirchoff's Law. A study of the sources of direct current voltage potentials. Fundamental concepts of alternating current flow, reactance, impedance, phase angle, power, and resonance. Analysis of alternating current circuits.

Prerequisite: None.

**ELC 1113 ALTERNATING CURRENT AND DIRECT CURRENT MACHINES AND CONTROLS****5 12 9**

Provides fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers, and motors. Instruction in the use of electrical test instruments in circuit analysis. The basic concepts of AC and DC machines and simple system controls. An introduction to the type control used in small appliances such as: thermostats, timers, or sequencing switches.

Prerequisites: ELC 1112, MAT 1115.

**ELC 1114 ELECTRICAL CONTROLS****2 4 3**

Continued study of electrical controls, with emphasis on single phase, and three phase across the line starters. Mock-ups of controls used in industry will be studied with trouble-shooting techniques being applied. Use of wiring diagrams and schematics in advanced and complex control systems.

Prerequisites: ELC 1112, ELC 1113, MAT 1115.

**ELN 1118 INDUSTRIAL ELECTRONICS****3 6 5**

Basic theory, operating characteristics, and application of vacuum tubes such as : diodes, triodes, tetrodes, pentodes, and gaseous control tubes. An introduction to amplifiers using triodes, power supplies using diodes, and other basic applications.

Prerequisite: ELC 1113.

**ELN 1119 INDUSTRIAL ELECTRONICS****3 6 5**

Basic industrial electronic systems such as: motor controls, alarm systems, heating systems and controls, magnetic amplifier controls, welding control systems using thyatron tubes, and other basic types of systems commonly found in most industries.

Prerequisite: ELN 1118.

**ELC 1124 RESIDENTIAL WIRING 5 9 8**

Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residential applications such as services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits, National Electrical Code regulations in actual building mock-ups.

Prerequisites: ELC 1113, DFT 1110.

**ELC 1125 COMMERCIAL AND INDUSTRIAL WIRING 3 8 6**

Layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Codes, and the application of the fundamentals to practical experience in wiring, conduit preparation, and installation of simple systems.

Prerequisites: ELN 1118, ELC 1124.

**MACHINE SHOP**

Course Title	Quarter		
	Class	Lab	Credit

**MEC 1101 MACHINE SHOP THEORY AND PRACTICE 2 12 6**

An introduction to the machinist trade and the potential it holds for craftsman. Deals primarily with the identification, care and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes of lathe, drill press, grinding (off-hand) and milling machines will be introduced both in theory and practice.

Prerequisite: None.

**MEC 1102 MACHINE SHOP THEORY AND PRACTICE 2 12 6**

Advanced operations in layout tools and procedures, power sawing, drill press, surface grinder, milling machine shaper. The student will be introduced to the basic operations on the cylindrical grinder and will select projects encompassing all the operations, tools and procedures thus far used and those to be stressed throughout the course.

Prerequisite: MEC 1101.

**MEC 1103 MACHINE SHOP THEORY AND PRACTICE 4 12 8**

Advanced work on the engine lathe, turning, boring and threading machines, grinders, milling machine and shaper. Introduction to basic indexing and terminology with additional processes on calculating, cutting and measuring of spur, helical, and worm gears and wheels. The trainee will use precision tools and measuring instruments such as vernier height gages, protractors, comparators, etc. Basic exercises will be given on the turret lathe and on the tool and cutter grinder.

Prerequisite: MEC 1102.

**MEC 1104 MACHINE SHOP THEORY AND PRACTICE 4 12 8**

Development of class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly and inspection. Additional processes on the turret lathe, tool and cutter grinder, cylindrical and surface grinder, advanced milling machine operations, etc. Special procedures and operations, processes and equipment, observing safety procedures faithfully and establishing of good work habits and attitudes acceptable to the industry.

Prerequisite: MEC 1103.

**MEC 1112 MACHINE SHOP PROCESSES 1 3 2**

To acquaint the student with the procedures of layout work and the correct use of hand and machine tools. Experiences in the basic fundamentals of drill press and lathe operation; hand grinding of drill bits and lathe tools; set-up work applied to the trade.

Prerequisite: None.

**MEC 1115 TREATMENT OF FERROUS METALS 2 3 3**

Investigates the properties of ferrous metals and tests to determine their uses. Instructions will include some chemical metallurgy to provide a background for the understanding of the physical changes and causes of these changes in metals. Physical metallurgy of ferrous metals, producing iron and steel, theory of alloys, shaping and forming, heat treatments for steel, surface treatments, alloy of special steel, classification of steels, and cast iron will be topics for study.

Prerequisite: None.

**MEC 1116 TREATMENT OF NON-FERROUS METALS 2 3 3**

Continuation of the study of physical metallurgy. The non-ferrous metals: bearing metals, (brass, bronze, lead), light metals (aluminum and magnesium), and copper and its alloys are studied. Powder metallurgy, titanium, zirconium, indium and vanadium are included in this course.

Prerequisite: MEC 1115.

**PRACTICAL NURSING EDUCATION**

Course Title	Quarter			
	Class	Lab	Clinical	Credit
<b>NUR 1101 FUNDAMENTALS OF NURSING</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>11</b>

This is an introductory course which provides opportunity for students to become oriented to basic facts, concepts, and principles related to nursing roles and functions and health needs of patients. Principles of body mechanics and asepsis, assistance with daily living activities, and other basic nursing functions are included. Nurse-patient relationships and the nursing processes are explored. Nursing laboratory and Randolph Hospital will be used for supervised practice of skills.

**NUR 1102 ANATOMY** 5 0 0 5

A study of the normal structure and functions of the human body with man identified as a living organism composed of cells, tissues, organs, and systems. The normal body is studied as a basis for understanding variations from the normal. Included are the integumentary, muscular-skeletal, circulatory, respiratory, urinary, reproductive, endocrine, nervous, sensory and digestive systems. Basic concepts from physics and biology including immunology are presented as they relate to nursing. The nursing laboratory will be utilized in study and examination of charts, skeletal and other models of human body parts.

**NUR 1103 NUTRITION** 3 0 0 3

Presents practical study of nutrients, how they are used by the body, sources and types of food necessary for the balanced diet and variations of basic diet to meet development or other needs. Physiological processes of digestion, absorption, and metabolism are discussed. An introduction to the most commonly used hospital diets is included.

**NUR 1106 MATERNAL HEALTH NURSING** 5 0 9 8

A study of physiology and nursing care of the woman during antepartum, labor, delivery and post partum period. Most frequently observed complications will be presented, however emphasis will be on the normal. Characteristics and nursing care of the normal newborn are also presented. Some time will be devoted to the more common complications in the mother and to care of the newborn. Supervised clinical experience with selected patients will be provided concurrently with theory.

Prerequisites: NUR 1101, NUR 1102, NUR 1103.

**NUR 1107 CHILD HEALTH NURSING** 5 0 9 8

A study of the role of the practical nurse in the special patient-nurse-family relationship in her nursing care of the child. Relates the study of growth and development along with presentation of common childhood disorders at the various ages. Supervised clinical experience with selected patients will be provided.

Prerequisites: NUR 1101, NUR 1102, NUR 1103.

**NUR 1108 GROWTH AND DEVELOPMENT** 3 0 0 3

A study of the basic principles of physiological and psychosocial growth states of the individual from conception through adulthood. Emphasis is on personality development and those factors both inside and outside the individual which might have an influence on its development. The lifespan approach, based on chronological development, is the basis for study. The basic theme presented is that the individual grows in five ways: physically, mentally, socially, emotionally, and morally. These five types of growth are presented for each period of growth along with the specific developmental tasks. There is also an emphasis on universal principles of growth and development.

**NUR 1109 PHARMACOLOGY** 3 0 0 3

Presents the student with facts concerning sources, effects, legalities, and usage of drugs as therapeutic agents. Conversion between systems, prescriptions of medications, drug classifications, and nursing implications are covered. Emphasis is placed on the nurse's responsibilities in relation to drug administration. Prepares the student for the process of administering drugs. Practice opportunities are provided in classroom and clinical learning experiences.

**NUR 1110 MEDICAL-SURGICAL NURSING I** 9 0 18 15

Provides introduction to nursing care of patients with problems caused by illness. Cause and symptoms of illness, pre-and post-operative care, long term illness, rehabilitation and care of the geriatric patient, care of the patient with cancer and the dying patient are considered. Nursing needs and care of patients with disorders of the cardiovascular and respiratory and gastrointestinal system are studied. Clinical learning experiences are planned using selected patients on the Medical-Surgical units of Randolph Hospital and additional experiences will be planned in operating room, recovery room and coronary care and intensive care units either with Medical-Surgical I or Medical-Surgical Nursing II.

Prerequisites: NUR 1101, NUR 1102, NUR 1103 and NUR 1109.

**NUR 1112 MEDICAL-SURGICAL NURSING II** 9 0 18 15

Continues the study of illness in body systems, includes cause, symptoms, diagnosis, treatment and emphasizes nursing care. Disaster and emergency nursing are included. Learning experiences are planned in Medical Surgical units and in Emergency room of Randolph Hospital.

Prerequisite: NUR 1110.

**NUR 1114 VOCATIONAL ADJUSTMENT** 2 0 0 2

A course designed to present the practical nurse's ethical and legal responsibilities, organizations for membership, job opportunities, and the history of nursing. Patterns of providing nursing care will be discussed.

## WELDING

Course Title	Quarter		
	Class	Lab.	Credit
<b>WLD 1101 BASIC GAS WELDING</b>	0	3	1

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding; bronze welding, silver soldering, and flame-cutting methods applicable to mechanical repair work.

Prerequisite: None.

**WLD 1112 MECHANICAL TESTING AND INSPECTION 1 3 2**

The standard methods for mechanical testing of welds. The student is introduced to the various types of tests and testing procedures and performs the details of the test which will give adequate information as to the quality of the weld. Types of tests to be covered are: bend, destructive, free-bend, guided-bend, nick-tear, notched-bend, tee-bend, nondestructive, V-notch, Charpy impact, etc.

Prerequisites: WLD 1120, WLD 1121.

**WLD 1120 OXACETYLENE WELDING AND CUTTING 3 12 7**

Introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, assembly of units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead position, brazing, hard and soft soldering. Safety procedures are stressed throughout the program of instruction in the use of tools and equipment. Students perform mechanical testing and inspection to determine quality of the welds.

Prerequisite: None.

**WLD 1121 ARC WELDING 3 12 7**

The operation of AC transformers and DC motor-generator arc welding sets. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weakness in welding. Safety procedures are emphasized throughout the course in the use of tools and equipment.

Prerequisite: None.

**WLD 1122 COMMERCIAL AND INDUSTRIAL PRACTICES 3 9 6**

Designed to build skills through practices in simulated industrial processes and techniques: sketching and laying out on paper the size and shape description, listing the procedure steps necessary to build the product, and then actually following these directions to build the product. Emphasis is placed on maintenance, repairing worn or broken parts by special welding applications, field welding and nondestructive tests and inspection.

Prerequisites: WLD 1120, WLD 1121.

**WLD 1123 INERT GAS WELDING 1 3 2**

Introduction and practical operations in the use of inert-gas-shield arc welding. A study will be made of the equipment, operation, safety and practice in the various positions. A thorough study of such topics as: principles of operation, shielding gases, filler rods, process variations and applications, manual and automatic welding.

Prerequisites: WLD 1120, WLD 1121.

**WLD 1124 PIPE WELDING 3 12 7**

Designed to provide practice in the welding of pressure piping in

the horizontal, vertical, and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME code.

Prerequisite: WLD 1121.

**WLD 1125 CERTIFICATION PRACTICES 3 6 5**

This course involves practice in welding the various materials to meet certification standards. The student uses various tests including the guided bend and the tensile strength tests to check the quality of his work. Emphasis is placed on attaining skill in producing quality welds.

Prerequisites: WLD 1120, WLD 1121, WLD 1123, WLD 1124.

**RELATED COURSES (Business)**

Course Title	Quarter Hours		
	Class	Lab.	Credit
<b>BUS 1103 SMALL BUSINESS OPERATIONS</b>	<b>3</b>	<b>0</b>	<b>3</b>
An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations.			
Prerequisite: None.			

**DRAFTING**

Course Title	Quarter Hours		
	Class	Lab.	Credit
<b>DFT 1101 SCHEMATICS &amp; DIAGRAMS: POWER MECHANICS</b>	<b>0</b>	<b>3</b>	<b>1</b>
Interpretation and reading of blueprints. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes.			
Prerequisite: None.			
<b>DFT 1104 BLUEPRINT READING: MECHANICAL</b>	<b>0</b>	<b>3</b>	<b>1</b>
Interpretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes.			
Prerequisite: None.			

**DFT 1105 BLUEPRINT READING: MECHANICAL 0 3 1**

Further practice in interpretation of blueprints as they are used in industry; study of prints supplied by industry; making plans of operations; introduction to drafting room procedures; sketching as a means of passing on ideas, information and processes.

Prerequisite: DFT 1104.

**DFT 1106 BLUEPRINT READING: MECHANICAL 0 3 1**

Advanced blueprint reading and sketching as related to detail and assembly drawings used in machine shops. The interpretation of drawings of complex parts and mechanisms for features of fabrication, construction and assembly.

Prerequisite: DFT 1105.

**DFT 1110 BLUEPRINT READING: BUILDING TRADES 0 3 1**

Principles of interpreting blueprints and trade specifications common to the building trades. Development of proficiency in making three view and pictorial sketches.

Prerequisite: None.

**DFT 1113 BLUEPRINT READING: ELECTRICAL 0 3 1**

Interpretation of schematics, diagrams and blueprints applicable to electrical installations with emphasis on electrical plans for domestic and commercial buildings. Sketching schematics, diagrams, and electrical plans for electrical installations using appropriate symbols and notes according to the applicable codes will be a part of this course.

Prerequisite: DFT 1110.

**DFT 1117 BLUEPRINT READING: WELDING 0 3 1**

A thorough study of trade drawings in which welding procedures are indicated. Interpretation, use and application of welding symbols, abbreviations, and specifications.

Prerequisite: DFT 1104.

**DFT 1118 PATTERN DEVELOPMENT AND SKETCHING 0 3 1**

Continued study of welding symbols; methods used in layout of sheet steel; sketching of projects, jigs and holding devices involved in welding. Special emphasis is placed on developing pipe and angle layouts by the use of patterns and templates.

Prerequisite: None.

**DFT 1180 DRAFTING TRADES I 2 2 2**

Fundamental drafting principles with instruction and practice lettering, orthographic projection, working drawings. Introduction to the principles of sectioning, dimensioning, use of drawing instruments and the solution of geometrical problems are covered. This is an introductory course in drafting for students needing a knowledge of drawing principles for reading and describing objects in the graphic language.

Prerequisite: None.

**ENGLISH**

Course Title	Quarter Hours		
	Class	Lab.	Credit

**ENG 1101 READING IMPROVEMENT 2 0 2**

Designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition and to train for comprehension in larger units.

Prerequisite: None.

**ENG 1102 COMMUNICATION SKILLS 3 0 3**

Designed to promote effective communication through correct language usage in speaking and writing.

Prerequisite: ENG 1101.

Course Title	Quarter Hours			
	Class	Lab	Clinical	Credit

**ENG 1102N COMMUNICATION SKILLS 3 0 0 3**

A course designed to promote effective communication through correct language usage in speaking and writing.

**MATHEMATICS**

Course Title	Quarter Hours		
	Class	Lab.	Credit

**MAT 1101 FUNDAMENTALS OF MATHEMATICS 5 0 5**

Analysis of basic operations: addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Introduction to algebra used in trades. Practice in depth.

Prerequisite: None.

**MAT 1103 SHOP MATH I 3 0 3**

Fundamental properties and definitions; plane and solid geometric figures, selected general theorems, geometric construction of lines, angles and plane figures. Areas of plane figures, volumes of solids. Geometric principles are applied to shop operations.

Prerequisite: MAT 1101.

**MAT 1104 SHOP MATH II 3 0 3**

Trigonometric ratios; solving problems with right triangles, using

tables, and solution of oblique triangles using law of sines and law of cosines. All topics are applied to practical problems.

Prerequisites: MAT 1103.

### **MAT 1115 ELECTRICAL MATH** 5 0 5

A study of fundamental concepts of algebra; basic operations of addition, subtraction, multiplication, and division; solution of first order equations, use of letters and signs, grouping, factoring, exponents, ratios, and proportions; solution of equations, algebraically and graphically; a study of logarithms and use of tables; an introduction to trigonometric functions and their application to right angles; and a study of vectors for use in alternating current.

Prerequisite: None.

### **MAT 1123 SHOP MATH III** 3 0 3

Introduces gear ratio, lead screw and indexing problems with emphasis on application to the machine shop. Practical applications and problems furnish the trainee with experience in geometric propositions and trigonometric relations to shop problems; concludes with an introduction to compound angle problems.

Prerequisite: MAT 1104.

## **PHYSICS**

Course Title	Quarter Hours		
	Class	Lab	Credit

### **PHY 1101 APPLIED SCIENCE** 3 2 4

An introduction to physical principles and their application in industry. Topics in this course include measurement; properties of solids, liquids, and gases; basic electrical principles.

Prerequisite: None.

### **PHY 1102 APPLIED SCIENCE** 3 2 4

The second in a series of two courses of applied physical principles. Topics introduced in this course are heat and thermometry, and principles of force, motion, work, energy, and power.

Prerequisite: PHY 1101.

## **SOCIAL SCIENCE**

Course Title	Quarter Hours		
	Class	Lab	Credit

### **PSY 1101 HUMAN RELATIONS** 3 0 3

A study of basic principles of human behavior. The problems of the

individual are studied in relation to society, group membership, and relationships within the work situation.

Prerequisite: None.

Course Title	Quarter Hours		
	Class	Lab	Clinical Credit

### **PSY 1101N HUMAN RELATIONS** 3 0 0 3

This course focuses on the responsibilities of the practical nurse in working with others, patients in particular. It is an introduction to the basic principles of human behavior, the philosophy of individual worth, basic need theories, and interpersonal relations. The understanding of some of life's critical problems is an important aspect of the course. Adjustment, adolescence, suicide, illness, aging and retirement, and dying and grieving are some of the topics of discussion. The atmosphere of the course is very relaxed and class discussion is the primary means of exploring material.

## **AUTOMOTIVE MECHANICS**

### **Vocational Certificate Program**

Course Title	Quarter Hours		
	Class	Lab	Credit

### **AHR 1101A AUTOMOTIVE AIR CONDITIONING** 1 2 2

General introduction to automotive air conditioning units. A study of the assembly of components and connections necessary in the mechanisms; other topics included are the methods of operation and proper handling of refrigerants in charging the systems.

### **AUT 1121A AUTO BRAKING SYSTEMS** 1 2 2

A study of the various braking systems employed on automotive vehicles. Emphasis is placed on how they operate, proper adjustments and repair.

### **AUT 1123A CHASSIS AND SUSPENSIONS** 2 4 4

Principles and functions of the components of automotive chassis. Practical job instruction of adjusting and repairing of suspensions, and steering systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage and front alignment.

### **AUT 1124A AUTOMOTIVE POWER TRAIN** 2 4 4

A study of principles and functions of automotive power train systems; clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Servicing and repair of systems will be stressed.

**AUT 1125A AUTOMOTIVE TROUBLE SHOOTING** 0 5 2

Emphasis on shop procedures necessary in determining the nature of troubles developed in various component systems.

Prerequisite: Consent of instructor.

**ENG 1102** 2 0 2

Designed to promote effective communication through correct language usage in speaking and writing.

**MAT 1101 FUNDAMENTALS OF MATHEMATICS** 5 0 5

Analysis of basic operations: Addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Introduction to algebra used in trades. Practice in depth.

**PME 1101A AUTOMOTIVE ENGINES** 2 4 4

Development of knowledge and ability in using, maintaining, and storing the various brand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Methods of testing and repairing various engine components.

**PME 1102A AUTOMOTIVE FUEL SYSTEMS** 2 4 4

The fuel systems of the automobile, fuel pumps, carburetors and injectors will be studied. The characteristics of fuels, types of fuel systems, special tools, and testing equipment for fuel systems will also be studied.

**PME 1102B AUTOMOTIVE ELECTRICAL SYSTEMS** 2 4 4

This course is a study of the electrical system of the automobile including: battery cranking mechanism, generator, ignition, accessories and wiring. Also being studied will be special tools and testing equipment for the electrical system.

**WLD 1100 BASIC GAS WELDING** 2 4 4

Following a thorough discussion of safety rules, this course in welding will survey the principles and practices of oxyacetylene welding and cutting. Emphasis will be on student use of equipment and skill building.

**ELECTIVES:****PME 1126 SMALL ENGINE REPAIR** 2 4 4

General introduction to the principles of two and four cycle motor-cycle engines. Shop work will be devoted to carburetion, ignition, tune-ups, and "trouble-shooting," with emphasis being placed on the complete rebuilding of an engine and transmission.

**ELECTRICAL MAINTENANCE****Vocational Certificate Program**

Course Title	Quarter		
	Hours	Class	Lab. Credit

**AHR 1121A PRINCIPLES OF REFRIGERATION AND AIR CONDITIONING** 1 2 2

An introduction to the principles of refrigeration, terminology, the use and care of tools and equipment, and the identification and the function of the component parts of a system. Other topics to be included will be the basic laws of refrigeration; characteristics and comparison of the various refrigerants; the use and construction of valves, fittings, and basic controls. Practice work includes tube bending, flaring and soldering. Standard procedures and safety measures are stressed in the use of special refrigeration service equipment and the handling of refrigerants.

**DFT 1180A DRAFTING TRADES** 1 2 2

Fundamental drafting principles with instruction and practice lettering, orthographic projection, and working drawings. Introduction to the principles of sectioning, dimensioning, and use of drawing instruments are covered. This is an introductory course in drafting for students needing a knowledge of drawing principles.

**ELC 1112A DIRECT CURRENT** 2 4 4

This course will primarily consist of a study of direct current. The major topics to be covered are: practical application in wiring switches, receptacles, and cable runs, meters, magnetism, batteries, D. C. generators, and D. C. motors.

**ELC 1112B DIRECT CURRENT** 2 4 4

A continuation of ELC 1112A.

Prerequisite: ELC 1112A.

**ELC 1113A ALTERNATING CURRENT** 2 4 4

A course concerned with the study of alternating current. The major topics are as follows: Basic A. C. theory, inductance, Capacitance, R. L. C. circuits, transformers (single phase), three phase current, three phase transformers, three phase motors, and single phase motors.

Prerequisite: ELC 1112, MAT 1115

**ELC 1113B ALTERNATING CURRENT** 2 4 4

A continuation of ELC 1113A.

Prerequisites: ELC 1112B, ELC 1113A.

**ELC 1114 INDUSTRIAL CONTROL CIRCUITS** 2 4 3

Is a study of industrial control circuits. Pilot devices such as push

- buttons, limit switches, pressure switches, float switches, etc. are discussed. Magnetic devices such as relays and motor starter are used in the lab to enable the student to gain practical knowledge through hands-on experience. Wiring diagrams and schematics are used to wire control circuits in lab.

Prerequisites: ELC 1113B, MAT 1115.

**ELN 1118A BASIC INDUSTRIAL ELECTRONICS 2 4 4**

Is to deal with basic electronic devices such as rectifiers, transistors, S.C.R.'s, triacs, and light operated devices. Electronics will be used to operate low voltage control circuits.

Prerequisite: ELC 1113B.

**ELN 1119 DIGITAL INDUSTRIAL ELECTRONICS 3 6 5**

Is a study of digital electronics similar to the micro-processors used in industry.

Prerequisite: ELC 1118A.

**ENG 1102 COMMUNICATION SKILLS 2 0 2**

A course designed to promote effective communication through correct language usage in speaking and writing.

**MAT 1115 ELECTRICAL MATH 5 0 5**

To consist of basic mathematics starting with simple fractions and progressing to algebra. Basic electricity and series-parallel circuits will be included with the math.

**ELECTIVES:**

**ELC 1109 INDUSTRIAL POWER SYSTEMS 2 4 4**

This is a study of methods, materials, and codes for the construction of industrial power and control systems. The student will gain a practical knowledge with hands-on experience in the construction of power and control circuits. The use of wiring diagrams, schematics, and NEC will be used as they relate to industrial electrical construction and maintenance.

**ELC 1135 PNEUMATIC AND ELECTRICAL CONTROLS**

This course is a study of the basic principles of pneumatic and hydraulic fluids. The student will gain a practical knowledge of pneumatic cylinders, hydraulic cylinders, pneumatic valves, hydraulic valves and the related electrical controls. Standard symbols, schematics and wiring diagrams will be used as they relate to pneumatic and hydraulic control systems.

Prerequisite: Consent of instructor.

## FLORAL DESIGN

### Technical Certificate Program

Course Title	Quarter Hours		
	Class	Lab	Credit
<b>FLO 101A FLORAL DESIGN I</b>	<b>1</b>	<b>6</b>	<b>3</b>
An introduction to the language of the industry through business procedures and its products. A basic study of floral supplies, design, tools, color and production methods. A study of buying perishables and non-perishable items and their storage and care. Students will be given study cases of national, international, and local membership agencies for florist. A study of the history and principles of flower arrangements.			
<b>FLO 102A FLORAL DESIGN II</b>	<b>1</b>	<b>6</b>	<b>3</b>
A course dealing with geometric design of floral arrangements. With the use of artificial flowers, each student will design corsages, hospital arrangements, novelties, and funeral designs. Student designs will become a part of subject matter with visual marketing value. Price, mark-up, and profit will be studied with each design.			
<b>FLO 103A FLORAL DESIGN III</b>	<b>1</b>	<b>6</b>	<b>3</b>
Basic study of a flower shop interior and exterior. A layout will be made of a flower shop for a complete study of sight and location, time and motion, lighting, equipment, display window, work room and sales area. Introduction of wedding equipment and fashions and styles of wedding bouquets. Relationship of florist and church, wedding rehearsals and methods of formal decorations.			
<b>FLO 201A FLORAL DESIGN IV</b>	<b>1</b>	<b>6</b>	<b>3</b>
A course dealing with basic principles of taking orders over the telephone learning to sell an item that the customer does not see. Actual experience through classroom exercises with the use of a telephone system. Merchandising, mass market outlets, and cash-and-carry of perishable and non-perishable items. A review of the history and creative ability of flower arrangements.			
<b>FLO 202A FLORAL DESIGN V</b>	<b>1</b>	<b>6</b>	<b>3</b>
A continued study of all geometric design forms with the use of fresh flowers: holiday, hospital, funeral, and novelties.			
<b>FLO 203A FLORAL DESIGN VI</b>	<b>1</b>	<b>6</b>	<b>3</b>
An introduction of diversification through a study of craft arts-window props, display items, created with carved styrofoam, papier mache, mosaics and decoupage. A review study using artificial, fresh flowers, and dried materials in creative arrangements.			

**HOR 150A PLANT IDENTIFICATION  
AND NOMENCLATURE****1 2 2**

A study in identification of landscape plants, shrubs and trees, their use and directions for planting.

**HOR 251A RESIDENTIAL LANDSCAPING****1 2 2**

An introduction to the beginner to create habitat for man to live. Sketching, fitting plants, lawns and care will be discussed

**HOR 254A PLANT PROPAGATION****1 2 2**

A study of basic concepts and principles of sexual and asexual propagation. Techniques are learned through practical exercises conducted in laboratory sessions. Emphasis is given to those propagation methods widely utilized in the nursery industry.

**HOR 254B PLANT PROPAGATION****1 2 2**

A continuation of HOR 254A.

**HOR 264A GREENHOUSE MANAGEMENT****1 2 2**

Fundamentals and practices in greenhouse plant production. Construction and management of plastic and glass greenhouses, including the control of heat, light, ventilation, and humidity. Crop studies include both cut flower and pot plant crops.

**HOR 264B GREENHOUSE MANAGEMENT****1 2 2**

A continuation of HOR 264A

**BUS 195 SMALL BUSINESS OPERATIONS****3 0 3**

An introduction to the business world, problems of small business operations, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations.

Prerequisites: ELC 1112B, MAT 1115.

**INDUSTRIAL MACHINIST****Vocational Certificate Program**

Course Title	Quarter		
	Class	Lab.	Hours Credit
<b>DFT 1104 BLUEPRINT READING: MECHANICAL</b>	<b>0</b>	<b>3</b>	<b>1</b>
Interpretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes.			
<b>DFT 1105 BLUEPRINT READING: MECHANICAL</b>	<b>0</b>	<b>3</b>	<b>1</b>
Further practice in interpretation of blueprints as they are used in industry; study of prints supplied by industry; making plans of operations; introduction to drafting room procedures; sketching as			

a means of passing on ideas, information and processes.

**DFT 1180A DRAFTING TRADES****1 2 2**

Fundamental drafting principles with instruction and practice lettering, orthographic projection, and working drawings. Introduction to the principles of sectioning, dimensioning, and use of drawing instruments are covered. This is an introductory course in drafting for students needing a knowledge of drawing principles.

**ENG 1102 COMMUNICATION SKILLS****2 0 2**

Designed to promote effective communication through correct language usage in speaking and writing.

**MAT 1101 FUNDAMENTALS OF MATHEMATICS****5 0 5**

Practical number theory; analysis of basic operations: addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.

**MAT 1103 SHOP MATH****3 0 3**

Fundamental properties and definitions; plane and solid geometric figures, selected general theorems, geometric construction of lines, angles and plane figures. Areas of plane figures, volumes of solids. Geometric principles are applied to shop operations.

**MEC 1101A MACHINE SHOP THEORY AND PRACTICE****2 4 4**

After briefing the machine shop student on proper work habits, this first quarter will survey hand tools, layout tools, measuring devices and power saws. Extensive lab work will be supplemented by classroom instruction.

**MEC 1101B MACHINE SHOP THEORY AND PRACTICE****2 4 4**

The second quarter will cover grinders, drill presses and drilling machines, lathes and milling machines. Directed student activities on each piece of equipment will be coupled with chalkboard presentations.

**MEC 1102A MACHINE SHOP****2 4 4**

Advanced operations in layout tools and procedures, power sawing, drill press, surface grinder, milling machine shaper. The student will be introduced to the basic operations on the cylindrical grinder and will select projects encompassing all the operations, tools and procedures thus far used and those to be stressed throughout the course.

**MEC 1102B MACHINE SHOP****2 4 4**

A continuation of MEC 1102A.

**MEC 1115 TREATMENT OF FERROUS METALS****2 3 3**

Investigates the properties of ferrous metals and tests to determine their uses. Instructions will include some chemical metallurgy to

provide a background for the understanding of the physical changes and causes of these changes in metals. Physical metallurgy of ferrous metals, producing iron and steel, theory of alloys, shaping and forming, heat treatments for steel, surface treatments, alloy of special steel, classification of steels, and cast iron will be topics for study.

#### **WLD 1100 BASIC GAS WELDING 2 4 4**

Following a thorough discussion of safety rules, this first quarter of welding will survey the principles and practices of Oxyacetylene Welding and cutting. Emphasis will be on student use of equipment and skill building.

#### **WLD 1102 BASIC ARC WELDING 2 4 4**

Electric arc welding with major emphasis on the development of student skills in theory and practice will comprise the second quarter. Running weld beads and the determination of proper inspection procedures to be followed are examples of activities carried on.

## **INDUSTRIAL MECHANICS**

### **Vocational Certificate Program**

Course Title	Quarter Hours		
	Class	Lab	Credit
<b>AHR 1121A PRINCIPLES OF REFRIGERATION AND AIR CONDITIONING</b>	<b>1</b>	<b>2</b>	<b>2</b>
An introduction to the principles of refrigeration, terminology, the use and care of tools and equipment, and the identification and the function of the component parts of a system. Other topics to be included will be the basic laws of refrigeration; characteristics and comparison of the various refrigerants; the use and construction of valves, fittings, and basic controls. Practical work includes tube bending, flaring and soldering. Standard procedures and safety measures are stressed in the use of special refrigeration service equipment and the handling of refrigerants.			
<b>AHR 1121B PRINCIPLES OF REFRIGERATION AND AIR CONDITIONING</b>	<b>1</b>	<b>2</b>	<b>2</b>
A continuation of AHR 1121A.			
<b>DFT 1104 BLUEPRINT READING: MECHANICAL</b>	<b>0</b>	<b>3</b>	<b>1</b>
Interpretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes.			
<b>DFT 1180A DRAFTING TRADES</b>	<b>1</b>	<b>2</b>	<b>2</b>
Fundamental drafting principles with instruction and practice lettering, orthographic projection, and working drawings. Introduction to the principles of sectioning, dimensioning, and use of drawing instruments are covered. This is an introductory course in drafting for			

students needing a knowledge of drawing principles.

#### **ELC 1105A INDUSTRIAL ELECTRICAL PRACTICES 2 4 4**

This course is used to provide a basic knowledge of industrial electrical practices. Major topics to be covered are Direct Current, Alternating Current, and Industrial Control Circuits. Students are to receive practical experience with switches, receptacles, meters, motors, generators, circuits, transformers, magnetic devices, and other applicable devices.

#### **ELC 1105B INDUSTRIAL ELECTRICAL PRACTICES 2 4 4**

A continuation of ELC 1105A.

#### **ENG 1102 COMMUNICATION SKILLS 2 0 2**

Designed to promote effective communication through correct language usage in speaking and writing.

#### **MAT 1101 FUNDAMENTALS OF MATHEMATICS 5 0 5**

Practical number theory; analysis of basic operations: addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.

#### **MEC 1101A MACHINE SHOP THEORY AND PRACTICE 2 4 4**

After briefing the machine shop student on proper work habits, this first quarter will survey hand tools, layout tools, measuring devices and power saws. Extensive lab work will be supplemented by classroom instruction.

#### **MEC 1101B MACHINE SHOP THEORY AND PRACTICE 2 4 4**

The second quarter will cover grinders, drill presses and drilling machines, lathes and milling machines. Directed student activities on each piece of equipment will be coupled with chalkboard presentations.

#### **WLD 1100 BASIC GAS WELDING 2 4 4**

Following a thorough discussion of safety rules, this first quarter of welding will survey the principles and practices of Oxyacetylene Welding and cutting. Emphasis will be on student use of equipment and skill building.

#### **WLD 1102 BASIC ARC WELDING 2 4 4**

Electric arc welding with major emphasis on the development of student skills in theory and practice will comprise the second quarter. Running weld beads and the determination of proper inspection procedures to be followed are examples of activities carried on.

### **ELECTIVES:**

#### **ELC 1135 PNEUMATIC AND ELECTRICAL CONTROLS**

This course is a study of the basic principles of pneumatic and hydraulic fluids. The student will gain a practical knowledge of pneumatic

cylinders, hydraulic cylinders, pneumatic valves, hydraulic valves and the related electrical controls. Standard symbols, schematics and wiring diagrams will be used as they relate to pneumatic and hydraulic control systems.

#### MEC 1155 MECHANICAL SYSTEMS

An introduction to mechanical systems including the use, design and or preventative maintenance for gears, sprockets, vacuum pumps, air compressors, piping, bearings, lubrication, vibratory bowls and tracks and conveying systems.

### INDUSTRIAL WELDING

#### Vocational Certificate Program

Course Title	Quarter Hours		
	Class	Lab.	Credit
<b>DFT 1104 BLUEPRINT READING: MECHANICAL</b>	0	3	1
Interpretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes.			
<b>DFT 1180A DRAFTING TRADES</b>	1	2	2
Fundamental drafting principles with instruction and practice lettering, orthographic projection, and working drawings. Introduction to the principles of sectioning, dimensioning, and use of drawing instruments are covered. This is an introductory course in drafting for students needing a knowledge of drawing principles.			
<b>ENG 1102 COMMUNICATION SKILLS</b>	2	0	2
Designed to promote effective communication through correct language usage in speaking and writing.			
<b>MAT 1101 FUNDAMENTALS OF MATHEMATICS</b>	5	0	5
Practical number theory; analysis of basic operations: addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.			
<b>MEC 1101A MACHINE SHOP</b>	2	4	4
After briefing the machine shop student on proper work habits, this first quarter will survey hand tools, layout tools, measuring devices and power saws. Extensive lab work will be supplemented by classroom instruction.			
<b>MEC 1101B MACHINE SHOP</b>	2	4	4
The second quarter will cover grinders, drill presses and drilling			

machines, lathes and milling machines. Directed student activities on each piece of equipment will be coupled with chalkboard presentations.

#### WLD 1100 BASIC GAS WELDING

2 4 4

Following a thorough discussion of safety rules, this first quarter of welding will survey the principles and practices of Oxyacetylene Welding and cutting. Emphasis will be on student use of equipment and skill building.

#### WLD 1102 BASIC ARC WELDING

2 4 4

Electric arc welding with major emphasis on the development of student skills in theory and practice will comprise the second quarter. Running weld beads and the determination of proper inspection procedures to be followed are examples of activities carried on.

#### WLD 1121A ARC WELDING

2 4 4

The operation of AC transformers and DC motor generator arc welding sets. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weakness in welding. Safety procedures are emphasized throughout the course.

#### WLD 1121B ARC WELDING

2 4 4

A continuation of WLD 1121A.

#### WLD 1124A PIPE WELDING

1 5 3

Designed to provide practice in the welding of pressure piping in the horizontal, vertical, and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME code.

#### WLD 1124B PIPE WELDING

1 5 3

A continuation of WLD 1124A.

#### ELECTIVES:

#### ELC 1135 PNEUMATIC AND ELECTRICAL CONTROLS

This course is a study of the basic principles of pneumatic and hydraulic fluids. The student will gain a practical knowledge of pneumatic cylinders, hydraulic cylinders, pneumatic valves, hydraulic valves and the related electrical controls. Standard symbols, schematics and wiring diagrams will be used as they relate to pneumatic and hydraulic control systems.

#### MEC 1155 MECHANICAL SYSTEMS

An introduction to mechanical systems including the use, design and/or preventative maintenance for gears, sprockets, vacuum pumps, air compressors, piping, bearings, lubrication, vibratory bowls and tracks and conveying systems.



## CONTINUING EDUCATION

Continuing Education Programs are organized as an educational task to help fill the otherwise unmet educational needs of the community as they are identified or anticipated. It provides opportunities for an adult, regardless of his educational background, to retain and update himself in employment, develop leadership and civic responsibility, grow in basic knowledge, improve in home and community life, expand knowledge in general education, and develop creativity in the fine arts. The programs are divided at present into eleven major areas.

The Continuing Education Division will award Continuing Education Units (CEU's) for appropriate programs. The CEU is a nationally recognized records devise for substance non-credit learning experiences. A CEU is defined as "10 hours of participation in an organized Continuing Education experience under responsible sponsorship and qualified instruction or direction."

**High School Equivalency Program (GED)** provides a way through which adults may qualify for the North Carolina High School Equivalency Diploma by proving their competency through testing. There is no charge for testing, nor is there any charge for pretest examination, instruction, and counseling which is offered through the Randolph Technical Institute Learning Lab.

**Adult High School Diploma Program** is offered in cooperation with the Randolph County Board of Education as a program whereby adults earn a high school diploma. Credits earned in a previous high school are accepted as a part of the 18 units which are required for graduation. Credits also may be awarded for work experience. Classes are held each quarter for earning credits.

**HRD, A Human Resource** development program, is designed to help persons become employable at their level of capacity.

**Public Service Programs** designed to provide training for public agencies such as law enforcement, fire departments, community groups in charge of hospitality and tourism, religious groups, and public school personnel.



**Business and Industrial Training Programs** to train supervisory personnel to increase efficiency of business organization, and to update employee vocational skills.

**New and Expanding Industry Training** to promote the expansion of existing industries and to assist in the training of employees for new industries being established in North Carolina.

**Professional and Inservice Programs** designed to provide classes, workshops, and seminars for such professional agencies as Health and Welfare and public school administration.

**Cultural Enrichment Programs** in the development of an appreciation of and performance skill in the fine arts.

**Family Life** classes in home life, consumer education, citizenship, and parent education.

# OCCUPATIONAL EXTENSION

The Occupational Extension Division cooperates with industry, professional organizations, and other interested groups in providing a varied group of curriculums and programs for the expressed purpose of updating and upgrading skills whereby the working person might enjoy a more satisfying and financially rewarding occupation. These classes may be held at any appropriate meeting place whether it be in industrial firms, public school buildings, libraries, or at the Institute.

The courses listed below are only a few of the many offerings available through the occupational extension division. Those persons interested in these or additional courses should contact the Continuing Education office for more information.

## FIRE SERVICE

Designed to train beginning firemen and upgrade experienced firemen in all aspects of firefighting procedures and equipment.

## MANAGEMENT DEVELOPMENT PROGRAM

Includes several courses designed to broaden the educational background of supervisors, to develop the leadership abilities of supervisors, and to provide preparatory supervision training.

## CPR AND FIRST AID

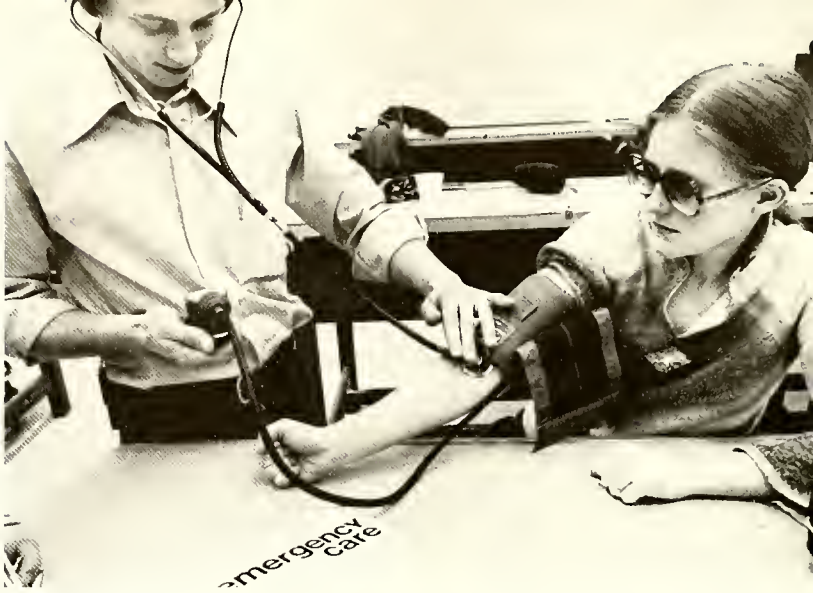
These courses are designed to train one how to properly administer first aid to a victim of accident or sudden illness.

## LAW ENFORCEMENT TRAINING

Offers training designed to meet the needs of State, county, city, and other law enforcement agencies. Includes the basic course required for certification.

## HOSPITALITY EDUCATION PROGRAMS

These programs are designed to aid personnel employed or seeking employment in Food Service, Hotel and/or Motel Management, Tourism or Travel Industry, Hospital Service and other related areas.



## EMERGENCY MEDICAL TECHNICIAN

This program is designed to aid one in becoming a state certified Emergency Medical Technician.

## OTHER PROGRAMS MAY INCLUDE

- Aviation Ground School
- Parent Education Courses
- Childbirth Education (for expectant parents)
- Woodworking
- Plumbing
- Home Repairs
- Increasing Reading Efficiency
- Public Speaking
- Nursing Programs

## ACADEMIC EXTENSION

Randolph Technical Institute offers Academic Extension classes as a part of its total community service. Courses are designed to meet the needs of adults in a variety of areas. These courses are offered on a day or evening basis as interest demands. Additional courses will be arranged where sufficient interest warrants such a course.

The courses listed below are only a partial listing of courses offered.

### BIBLE

Old Testament

New Testament

CAKE DECORATING

CERAMICS

CLOTHING CONSTRUCTION I

CLOTHING CONSTRUCTION II

CRAFTS

CREATIVE ART

CROCHETING

CUSTOM SEWING

DECOUPAGE

DRAPERY MAKING

DRAWING

DRIVER EDUCATION

GOURMET COOKING

HOME BAKING

KNITTING

LAPIDARY

MANUAL LANGUAGE

OIL PAINTING

PRE-RETIREMENT/RETIREMENT

RANDOLPH COUNTY HISTORY

RUG HOOKING

SOCIAL SECURITY AND YOU

SOLAR ENERGY —

WHAT DOES THE FUTURE HOLD

VOCAL MUSIC





## ADULT BASIC EDUCATION

Classes in Adult Basic Education are offered for adults, 18 years of age and over, who desire to improve their basic skills in reading, writing, arithmetic, and related subjects. Classes are offered on a non-fee basis in both the day and evening program. Classes are held throughout Randolph County and are intended to raise the educational standards of the individual to meet the demand of today's world.

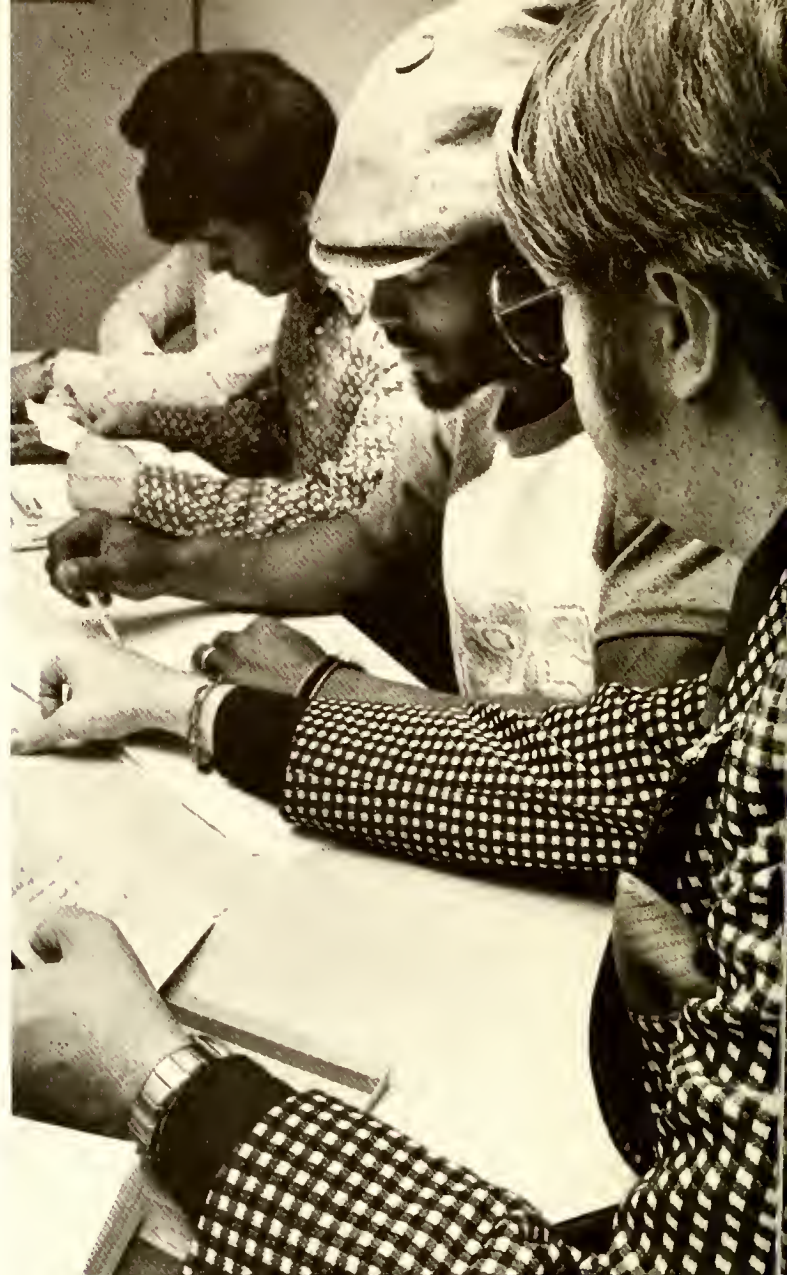
Individuals are tested, counseled, and placed in informal classes and progressed in each subject area at their own individual rate. These classes are ungraded and are taught with an adult approach. All Adult Basic Education classes are non-credit.

### **Beginning Level**

This level is for the student who has difficulty with recognizing words. A variety of materials and methods designed to help the individual learn to read as quickly as possible is used. Math and English are introduced as the student progresses. Some Consumer Education is offered.

### **Intermediate Level**

At this level, the student continues to build his vocabulary and expands his word recognition skills. Reading comprehension is stressed. Math, English, and Consumer Education skills are continued up to the high school level. History, science, current events are included.



## LEARNING LABORATORY

A complete adult high school program is offered to persons 18 years of age or older. The adult Learning Laboratory offers a new approach to education through the use of programmed instruction. These programmed materials enable the student to progress at his own speed and ability. Also, new students may enroll at anytime during the year.

There is a coordinator available in the Laboratory to assist all students between the hours of 8:00 a.m. to 10:00 p.m. Monday through Thursday and 8:00 a.m. to 5:00 on Friday. There is no cost to the student. Students completing high school through this program will be awarded a North Carolina High School Equivalency Diploma upon a satisfactory score on the General Education Development (G.E.D.) test.

### **CLASSROOM G.E.D.**

Since not everyone learns well in individualized instruction the classroom G.E.D. represents an alternate approach to study to take the G.E.D. tests. There are 15 weeks of instruction using a text which is specially prepared to teach the skills needed to be proficient on the G.E.D. tests. The book is semi-programmed so that the student can and should study at home—as well as in the classroom. Although all five areas are studied in this program, special emphasis is given to Math & English.



Also available through the Learning Laboratory are three Preparatory Programs designed to help the student get ready for entrance into a vocational, technical, or general field of study.

Vocational Preparatory	320 hours
Technical	640 hours
College Preparatory	900 hours

The Institute offers a High School Equivalency Program of 940 hours, which may be taken to remove deficiencies and meet entrance requirements into specific programs.

This High School Equivalency Program and Preparatory Programs are approved by the Veteran's Administration.

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